DOCUMENT RESUME

ED 324 746 EA 022 224

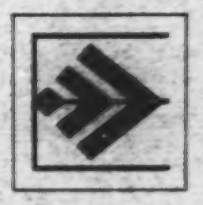
AUTHOR	Pareek, Udai; Rao, T. V.
TITLE	Handbook for Trainers in Educational Management--With Special Reference to Countries in Asia and the Pacific.
INSTITUTION	United Nations Educational, Scientific, and Cultural Organization, Bangkok (Thailand). Regional Office for Education in Asia and the Pacific.
PUB DATE	81
NOTE	285p.
PUB TYPE	Guides - Non-Classroom Use (055)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Administrator Role; *Educational Administration; *Educational Planning; Elementary Secondary Education; Foreign Countries; *Management Development; *Training Methods
IDENTIFIERS	*Asia; *Pacific Region

ABSTRACT

Within the framework of UNESCO's program in the field of educational policies, planning and administration, the training of educational planners, and the training and upgrading of educational administration staff is a high priority concern. Addressed to both trainers and practitioners, this three-part handbook stresses the development of training competencies, including training materials. To introduce trainers to the educational management scene in Asia and the Pacific, part A discusses some general issues, such as the role of educational planners and administrators, the importance of training in improving educational management, available training opportunities, and appropriate training contexts. This part also provides a country-by-country account of the training facilities and systems in Asia and the Pacific region for training educational managers. issues and concerns. The six chapters in part B discuss various aspects of planning and organizing training, including strategies, techniques of identifying training needs, modular curriculum development, methods of classifying training modalities, training institute organization, and techniques for evaluating training. Part C presents several effective methods for training administrators. Recognizing the serious limitations of the lecture method, the nine chapters in this section explore alternatives such as self-instruction materials, simulation exercises and games, in-basket exercises, and case method, role playing, field training, self-study and small group work, instrumented training, and distance training. (47 references) (MLH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED324746



Educational Planning and Management Service (EPMS)

HANDBOOK FOR TRAINERS IN EDUCATIONAL MANAGEMENT

with special reference to countries in Asia and the Pacific

U.S. DEPARTMENT OF EDUCATION
MATERIAL IN MICROFICHE ONLY
E. Djaka

Udai Pareek
T. V. Rao

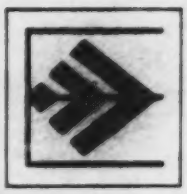
UNESCO REGIONAL OFFICE FOR EDUCATION IN ASIA AND THE PACIFIC
Bangkok, Thailand, 1981

EA 022 227

Pareek, Udai
Handbook for trainers in educational management with special reference to countries in Asia and the Pacific, by Udai Pareek /and/ T.V. Rao. Bangkok, Unesco, 1981.
ii, 273 p. (Unesco. Educational Planning, Management and Statistics Service)

1. EDUCATIONAL MANAGEMENT - HANDBOOKS - ASIA. I. Unesco. Regional Office for Education in Asia and the Pacific, Bangkok. II. Rao, T.V. III. Title. IV. Series.

379.15



Educational Planning and Management Service (EPMS)

HANDBOOK FOR TRAINERS IN EDUCATIONAL MANAGEMENT

with special reference to countries in Asia and the Pacific

Udai Pareek
T. V. Rao

UNESCO REGIONAL OFFICE FOR EDUCATION IN ASIA AND THE PACIFIC
Bangkok, Thailand, 1981

© Unesco 1981

Unesco Regional Office for Education in Asia and the Pacific
G.P.O. Box 1425
Bangkok, Thailand

Printed in Thailand

Opinions expressed in this publication do not necessarily coincide with any official views of Unesco. The designations employed and the presentation of the material herein do not imply the expression of any opinion whatsoever on the part of Unesco concerning the legal status of any country, or of its authorities, or concerning the delimitations of the frontiers of any country or territory.

BKEP/81/RHM/241-1200

CONTENTS

Foreword ..... (i)

Part A - Background

Chapter One : Introduction 2

Chapter Two : An overview of experiences in Asia and the Pacific 9

Chapter Three : Improving management through training 17

Part B - Planning and organizing training

Chapter Four : Designing a training strategy 23

Chapter Five : Identifying training needs 31

Chapter Six : Developing a curriculum 58

Chapter Seven : Selecting training modalities and methods 90

Chapter Eight : Organizing training 109

Chapter Nine : Evaluating training 122

Part C - Training modalities and methods

Chapter Ten : Self instructional material 139

Chapter Eleven : Simulation exercises and games 153

Chapter Twelve : In-basket exercises 169

Chapter Thirteen : Case method 183

Chapter Fourteen : Role playing 191

Chapter Fifteen : Field training 201

Chapter Sixteen : Self-study and small group work 210

Chapter Seventeen: Instrumented training 215

Chapter Eighteen : Distance training 241

References and select bibliography 271

FOREWORD

Within the framework of Unesco's programme in the field of educational policies, planning and administration, priority is being given to the training of educational planners at the regional and national levels as well as to the training and upgrading of national staff in educational administration and management. Within this framework the Unesco Regional Office for Education in Asia and the Pacific has been organizing annually over the last six years regional training activities in the field of educational planning and management as well as supporting national courses of this type.

Since 1979 UNDP has given funding support to an inter-country project entitled "Regional Technical co-operation for Training Educational Personnel in Planning and Management Using Distance Teaching and Other Techniques", which provides for,

a) the development of training materials,

b) the preparation of key-level training personnel, and

c) inter-country co-operation in pooling experiences and expertise, the exchange of materials and training modules, field testing of results and the like.

A Consultative Meeting on the UNDP Inter-country Project was held in Bangkok from 10 to 14 December 1979. The Meeting agreed, among other things, upon the preparation by the Unesco Regional Office for Education in Asia and the Pacific of a Training Handbook in educational planning and management, using all relevant expertise available in the region and taking into account the experiences gathered thus far in the region in the professional content and methodology of training educational planners and administrators.

A Draft Compendium of Resource Materials for the Training Handbook was compiled in the first instance. Based on these materials as well as others available from country sources in the region, Dr. Udai Pareek and Dr. T.V. Rao, both of the Indian Institute of Management, Ahmedabad, prepared a draft Handbook which was tested in use during the Sixth Group Training Course sum Staff Development Workshop in Educational Planning and Management held in Bangkok in October/November 1980. The present Handbook is the final product for which Unesco Regional Office expresses its gratitude to the authors, Dr. Udai Pareek and Dr. T.V. Rao.

The Handbook is addressed to the professional "trainers" as well as practitioners in educational management with primary emphasis on the development of training competencies including training materials. While its focus is on the field of educational management related problems in

the field of educational planning are also dealt with wherever relevant. It should be mentioned that, although this Handbook has been prepared with particular reference to countries in the region of Asia and the Pacific, the principles and methods of management training employed could be widely applicable in other countries also.

It is hoped that the Handbook will be useful to professional trainers as well as practitioners in the field of educational management. Any suggestions from them for improvement or modification will be gratefully received.

Director
Unesco Regional Office for Education
in Asia and the Pacific

Part A

BACKGROUND

Administrators are increasingly taking interest in the application of new advances in the science and practice of management to education. Specialised institutions to train education managers are being set-up in different countries. Trainers need to have a broad acquaintance with the scene of management in Asia and the Pacific Region. This part of the Handbook first discusses some general issues like the role of educational planners and administrators, the role of training in improving management of education, the training systems available, the context in which such training should take place including the common focal issues in educational administration, organizational mechanisms and main concerns of education systems and the broad scene of training education managers in the countries of the Region.

In Chapter One an attempt is made to introduce the reader to the role of educational administrators and the need for training them. Chapter Two attempts to provide an overview of the education management scene in Asia and the Pacific, by focusing on some of the emerging issues and challenges, and pointing out the training opportunities. Training in education planning and administration in Afghanistan, Bangladesh, Burma, India, Indonesia, Republic of Korea, Malaysia, Nepal, Pakistan, Papua New Guinea, Philippines, Sri Lanka and Thailand have been briefly outlined in this chapter. We hope these two chapters will provide the context and background of training in education management. Chapter Three discusses the role of training in improving education management, its limitations. In many cases improvement in education can be done through improvement of systems and practices, and training has a limited role to play.

Chapter One

INTRODUCTION

Education plays a very important role in the development of any nation and its economy. Education is a life-long process in which a person continuously acquires new capabilities, which may take the form of knowledge, skills, attitudes, values or combinations of these. The capabilities of people are the main assets of a nation in its development. However, these assets (in the form of effective human resources) can get wasted unless their development is monitored carefully. Such monitoring of the development of human capabilities needs to be done both in relation to the rate at which these are acquired and the nature of the capabilities acquired.

Role of educational planners and administrators

Educational planners and administrators play a critical role in fostering and monitoring the development of education in any country. Educational development is fostered and monitored through the following broad types of activities:

1. Estimating periodically the nature and extent of human capabilities required in the country for its development.
2. Planning new systems and activities required to develop these capabilities.
3. Initiating and monitoring changes in the activities of existing educational systems, and
4. Ensuring effective management of various educational systems.

In short, educational administrators are responsible for planned development of education.

The following categories of educational planners and administrators are involved in the above stated functions.

1. Heads of institutions including heads of schools, colleges, polytechnics and institutions of higher learning.
2. Heads of large systems e.g. Universities and national and regional level institutions of research and training.
3. District education officers who are in charge of a number of schools and other forms of education in a small to a medium sized geographic or educational units having high responsibility to monitor these systems.

4. Senior administrators at the state, provincial or regional levels who influence regional policies, and who have executive responsibilities for regional level education development.

5. Professional specialised planners at the central level planning agency, and with the central and state or provincial ministries of education.

6. Senior administrators at the central level who influence the national level policy making and who have executive responsibilities at national level.

7. Policy makers including the ministers, advisors to the ministries and others who participate in policy making.

The functions of these categories of officers vary quite a bit and depend on the position they occupy. However, the following activities or functions are generally involved:

1. Reviewing the system of education with a view to diagnosing its weaknesses and problems.

2. Designing and developing reform measure and innovations to remedy such weaknesses and problems.

3. Framing educational objectives and policies and proposing targets of educational development for the consideration of policy-makers.

4. Identifying and developing strategies for the implementation of such objectives, policies and targets.

5. Projecting the needs in resources for educational development.

6. Mobilizing and allocating such resources.

7. Monitoring the day-to-day operations of various systems through constant guidance, supervision, maintenance of information systems, and day-to-day operational decision-making.

8. Mobilizing public participation in educational development.

9. Co-ordinating the activities of different units and agencies in the educational system.

10. Liasing with agencies outside the educational system in co-ordinating related activities.

11. Developing plans of action and obtaining for them the necessary approvals of appropriate authorities.

12. Identifying programme details and formulating projects.

13. Managing programme and project operations.

14. Evaluating performance and progress of the educational system as a whole or of its sectors, and

15. Training and orienting personnel in various positions their roles in educational development.

Need for training in education planning and administration

Educational planners and administrators are in a way agents of educational change. Unless they perform their roles effectively educational development may slow down and may not properly get integrated with other developmental activities in a country. So it is important that an educational planner or administrator does a good job in relation to the tasks assigned to him.

Fortunately, some countries now have fairly developed management expertise. Many countries are also professionalising their planning and administration activities. By professionalising is meant using scientific orientation in decision making for educational management. There is a need to help educational managers to get acquainted with these techniques which are likely to help them do their jobs better.

The following types of new developments have posed challenges to educational planners and administrators: broadening of the concept of education, evolving new systems of education (e.g. non-formal educational systems, adult education programmes, distance teaching systems, open universities, and continuing education departments), growing unemployment in educated sections, increased awareness in the public about the need for education as well as the limitations of the existing systems of education, increased level of participation of the public in educational activities but lack of direction to their participation, increase in the gap between the needs of other developmental activities (agriculture, industry and other forms of economic activities etc.) and the education department, the felt need for a new economic order. Because of the nature of the system in which they work, the education managers are in a unique position to respond to these challenges by equipping themselves with the capabilities required to deal with these challenges. Some training technology is available in this regard and more appropriate training technology needs to be developed.

In a consultative meeting organized by the Unesco regional office for education in Asia and the Pacific at Bangkok in December 1979[1] the following problems and gaps in educational planning and management were identified.

1. Lack of awareness of basic concepts of planning.
2. Lack of expertise in converting plans to actions including programme formulation, identification of projects, prioratization, scheduling activities, monitoring through information systems and evaluation.
3. Lack of financial management skills.
4. Lack of skills to anticipate and manage organizational bottlenecks.

---

1. *Report of a Consultative Meeting on Development and Testing of National Training Material in Educational Planning and Management*, Bangkok 10-14 December 1979. Unesco, ROEAP, 1980. P. 13.

5. Decision-making skills.
6. Management of communication and consultation.
7. Insufficient co-ordination of various activities and with other departments.
8. Poor human relations.
9. Unsystematic management of institutions.
10. Insensitivity to problems of client groups and lack of capabilities to get meaningful participation from clients.
11. Evolving and managing appropriate norms, rules, work procedures and systems for various activities.
12. Lack of research and experimental orientations.
13. Inability to change orientation from maintenance management to development management. etc.

These gaps indicate the need as well as scope for training of education managers.

Training systems

Realising the need for training educational planners and managers many countries are making serious efforts to evolve different systems to train educational planners and administrators. These systems of training can be classified under the following forms.

1. Formal institutional training: In this type of training, either new institutions are established exclusively for training education managers or new units are added to existing institutions to offer formal training programmes for educational planners and administrators. Examples of such institutions include the Bangladesh Education and Extension Research Institute (BEERI) and the Academy of Fundamental Education (AFE) in Bangladesh, the National Institute of Educational Planning and Administration (NIEPA), the National Council of Educational Research and Training (NCERT), the State Institutes of Education (SIEs), the State Councils of Educational Research and Training (SCERTs), the Indian Institutes of Management (IIMs) and the Administrative Staff College of India (ASCI) in India, the Centre of Personnel Education and Training (PUSDIKLAT) in Indonesia, the Korean Educational Development Institute (KEDI) in the Republic of Korea, the Allama Iqbal Open University and the Bureau of Educational Planning and Management, Ministry of Education in Pakistan, the Malaysian Education Staff Training Institute (MESTI) in Malaysia, the Institute of Education in Nepal, the Staff Development Unit of the Ministry of Education, Science and Culture in Papua New Guinea, the Staff College for Educational Administration in Sri Lanka and the Centre for Educational Administration of the Ministry of Education in Thailand. Formalised inservice training programmes are offered in these institutions for various categories of personnel. The duration of the programmes also vary greatly. Besides these institutions the university departments of education in some of the countries offer regular Bachelors, Masters and Doctoral level programmes with specialization in Educational Administration.

2. Distance teaching: Since education is a continuous process and management techniques are continuously evolving and changing, it is not always possible to get the education managers to formal programmes. It is also difficult to have any long term in-service programmes. Moreover, in some countries a large number of education managers are to be covered. So distance teaching is becoming a very popular method for training education managers. Correspondence courses are being used in many countries. In some cases distance teaching is combined with periodic short training programmes. This form of training is becoming increasingly important.

3. Field studies: Observation and analysis of innovations and experiences of others is another potential mechanism of learning. Unesco and such other international agencies play a very active role in documentating and making these experiences available to others. On the basis of such information some countries pick up the leads and send their education planners and managers to study these experiences and benefit from them. Unesco also has been playing a significant role in sponsoring study teams for field visits. This is another form of training educational planners and administrators.

4. Other forms of information dissemination: Besides the above three forms of training there are other non-formal training systems available for educational planners and administrators. These include information dissemination through journals, newspapers, technical reports and other mechanisms. While these may not primarily focus on educational planning and administration, these may contain information stimulating ideas and insights for educational managers. APEID newsletter is a good example.

Of the above training systems, the first two are the most popular and deserve serious attention. The effectiveness of these systems depends upon how well they are designed, organised and operated. Effective management of these training systems requires a thorough understanding of the training process, mechanisms of identifying training needs, techniques of identifying and developing content or material that would cater to the training needs, capabilities to develop a training strategy, ability to design the curriculum, capabilities for managing the training, familiarization with different methods of training, ability to select appropriate method of training, evaluating the training and continuously improving the training design and content.

About the Handbook

This Handbook is intended to cater to these needs of professional trainers, managers cum trainers as well as training institutions in the field of educational administration and management. Specifically this Handbook intends to serve the following purposes.

1. To present a detailed outline of the training process and the role of the trainer in training educational administrators and managers.

2. To outline different methods of identifying training needs.

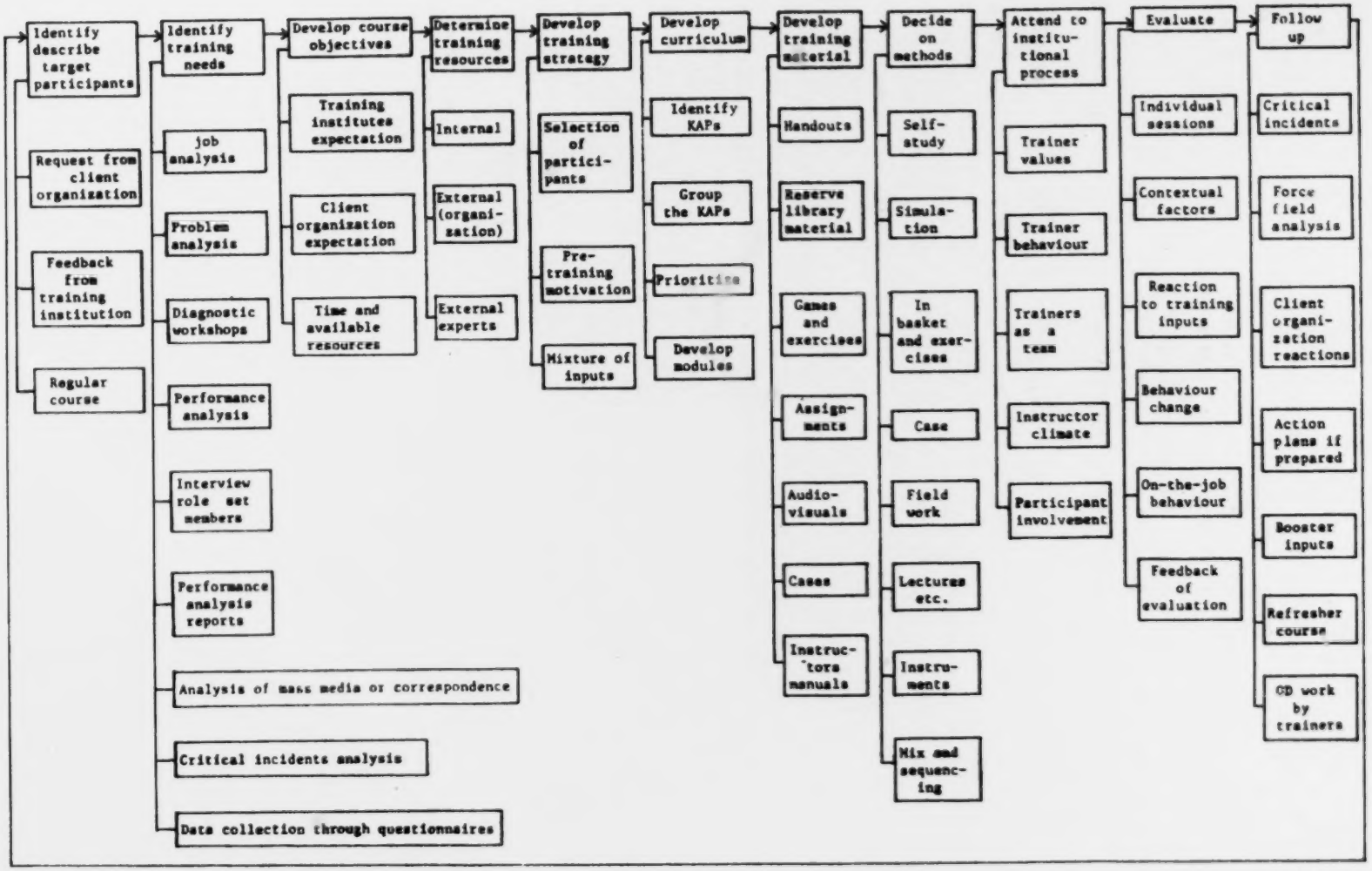
3. To present mechanisms of evolving and to present an overview of training strategies.
4. To discuss mechanisms of translating the training needs into a curriculum.
5. To discuss the various training modalities and methods and criteria for selecting the methods and modalities.
6. To outline some of the issues and choices to be made in organizing training.
7. To outline strategies of evaluating and improving training programmes.
8. To present mechanisms of organizing and managing distance training.
9. To present some detailed mechanisms for developing and using self-instructional material, case studies, role-plays, simulation exercises, field work and small group work.

Whenever possible illustrations have been given from programmes in this Region. As training experiences in education management are just evolving in this Region illustrations could not be provided for every topic. It is hoped that as more experiences become available, the Handbook will be enriched with more illustrations.

Training of education managers requires familiarity with educational planning and administration as well as training. Generally professional trainers lack familiarity with education management and education managers lack familiarity with the training technology. Increasingly experienced education managers are participating in training of educational planners and administrators. This book is meant for such managers, and for institutes engaged in the critical task of such training.

A schematic overview of the coverage of the Handbook is presented in figure 1.1. Several sequences (11) are discussed in the Handbook, as shown in the figure. Under each step, the sub-steps are given. A reader may start at any point, according to his need and background. The overview will help a reader to work out his/her own strategy of the use of the Handbook. The sub-titles give some details of the contents of each chapter. The introduction to each of the three parts in the Handbook will further help the reader to have a more detailed overview of the chapters.

Figure 1.1 Coverage of the Handbook: A Schematic Summary



Chapter Two

AN OVERVIEW OF EXPERIENCES IN ASIA AND THE PACIFIC

The need for training in planning and management of education has always existed in the past. However, some countries have only recently started making systematic efforts to meet this need by establishing specialized training institutions or bodies and providing infrastructural facilities for such training. In the past even among those countries that had some systems of training in education management, the concept and the content of training was narrow and was limited to educational supervision, understanding rules, regulations and procedures in educational administration for effectively ensuring conformity to rules, school plant maintance etc. Planning did not find a place, as all planning was done centrally, and did not involve more than a handful of those associated with education at the central level. Even among these few some happened to be general administrators having no insights into the dynamic systems of education. With increasing realization of the gaps created by this process of planning, and with the availability of modern management and data systems that help the planning process, many countries are shifting their planning strategy from centralized, top-down strategy to decentralized, participative, bottom-up strategy.

This change in strategy involving local agencies and managers of education systems created the need for developing of planning capabilities of administrators to help them to participate in and respond to new planning process and this contributes to the evolution and implementation of development plans effectively. Moreover, the new technologies of education in general and institutions in particular have been found useful in training education managers to ensure effective delivery of education services. These trends facilitated by the catalytic work done by Unesco have resulted in paying special attention to educational planning and management by several countries. In the last five years there have been some rapid developments in training educational planners and administrators. Some of these trends as reflected in different countries in the Region are briefly outlined here. These trends need to be viewed in the context of the nature of changes occuring and concerns being voiced increasingly in these countries in relation to educational planning. In this chapter these concerns that have implications for educational planning and management are presented, followed by country-wide efforts in training educational planners and administrators, reflecting the training needs and gaps experienced in the Region.

Emerging issues and challenges in educational planning in Asia and the Pacific.

The following issues and challenges have emerged during the last few years.

1. Ensuring links between education development and national development. Education could serve the needs of national development only if education goals are effectively linked with national development goals and if they are then translated to specific education activities or programmes. In order to ensure such a linkage educational planners need to plan educational activities in collaboration with other activities relating to industry, agriculture, communications, banking, cottage industry, health and population etc. This gives rise to the issue of managing intersectoral links in planning and implementation of educational activities at different levels in any country.

2. Need to plan and reorient educational activities to meet the manpower needs of the country.

3. Improvement of the quality of education for building up of a progressive society oriented towards modern science and technology.

4. Growing imbalances in educational expansion that resulted in problems like:

   a) disproportionately high amount of resources spent on formal systems and neglect of youth and adult education,

   b) provision of urban-oriented education for rural children resulting in high dropout rates,

   c) unemployment in certain sectors and shortage in certain other sectors,

   d) continued neglect of certain regions and classes for provision of educational facilities, etc.

5. Unrealistic planning and gaps between planning and implementation.

The new policy orientation in most countries take into consideration these problems and issues and try to solve these problems through various strategies including decentralized participative planning process. The new policy orientation recognizes that changes in education will have to be more and more qualitative rather than merely quantitative; there have to be much greater concentration of effort in responding to the learning needs of the deprived and disadvantaged sections; that education should be linked with productive work and strengthening of national unity and self-reliance.

It is being increasingly realized in most countries that:

   a) if educational reforms have to be responsive to social and economic needs, these must be based on widespread public discussion and participation;

   b) planning process has to be considerably decentralized and implementors should be incolved in planning;

c) educational planning should have a strong and reliable data base with indicators of performance for appraising quality, distributive justice, functional relevance and quantitative progress;

d) there is a need for systematic monitoring and evaluation in plan operations; and

e) appropriate research base should be developed to ensure more effective links of educational change with the demands of economic, social and cultural development.

The regional scene in the organization of education planning systems

In a recent report[1] of a Unesco workshop in Bangkok the general scene has been very well summarized.

Organizational mechanisms for educational planning have by now been established in all countries of the region, though their structure and functions vary according to the administrative and political set-up in each country. Educational plans in all the developing countries form a part of the overall national development plans. The earlier situation of isolation in which educational plans stood to other development plans is no longer a live issue. The techniques of educational planning suited to the conditions of the developing countries are also being progressively developed.

Educational research is being linked to educational planning. The educational planning units which have been established in the education ministries in recent years comprise both planning and research bureau (for example, Burma, Malaysia, Pakistan and Singapore). India has made a study - the first of its kind in the country - of the organization and functioning of educational administration and planning in different states and union territories and at the centre. Indonesia has established Planning units in the Regional offices of Education and Culture. Malaysia has taken steps to establish a data bank and intends to concentrate on action oriented research of practical value in the Research unit of the EPRD (Educational Planning and Research Division of the Ministry of Education). Its Evaluation unit plans to create a greater awareness of the need for systematic evaluation in the various divisions of the Ministry of Education and elsewhere. Two of the important functions of the newly created Bureau of Educational Planning in the Education Ministry of Pakistan include collection and dissemination of statistical date regarding education, and conduct and dissemination of educational research.

Along with educational planning, the mechanism for the management and administration of education are being strengthened. By and large centralized administrations are becoming decentralized (Bangladesh, Nepal, Philippines).

---

1. *Report of a Programme Development Workshop on Educational Planning and Management: Trends, Developments and Needs*, Bangkok 27 November - 5 December, Unesco, ROEAP 1979.

Several member states have initiated budgetary reforms based on the principle that modern budgeting techniques are a cornerstone of efficient pla.nning and management in education.

In Malaysia, Sri Lanka and the Philippines, the system of "programme budgeting" has been introduced, in one form or another, in the education sector. It entails the use of indicators of work measurement to ascertain the outputs of educational programmes wherever this is feasible. India has recommended to universities and similar educational institutions the adoption of performance budgeting. Indonesia and Nepal have for several years prepared their educational budget on the format of PPBS (Planning, Programming, Budgeting System). Pakistan is reviewing the planning and management problems arising out of separate budgeting for developmental and recurrent expenditure items, and proposes a better co-ordinated budgeting approach.

Furthermore, traditional rules and regulations governing the educational service have been reconsidered by some countries with a view to upgrading the efficiency of educational administration. Bangladesh has modified and reviewed the rules and rugulations relating to the administration of schools. Sri Lanka's Unified Education Service is aimed at facilitating the interchange between teaching and administrative positions, as well as staff rotation between districts, regions, and the centre.

Training in Educational planning and management in Asia and the Pacific

The following is an account of the training facilities and systems in Asia and the Pacific region to train educational planners and administrators.

Afghanistan: Educational planning and management activities are carried out by the Departments of Planning, Compilation and Translation, Primary Education and Administration in the Ministry of Education. The Department of Compilation and Primary Education jointly arrange seminars and develop training materials for educational administrators. The department of primary education disseminates learning material on education planning and management to educational administrators. The Administration Department develops strictly administrative training materials (budgeting, procurement etc.) for line administrators.

Provincial Directors of Planning, Provincial Director Generals of Education, Assistant Directors, and school supervisors are covered through these training efforts.

Bangladesh: In Bangladesh three institutions provide training in educational planning and administration. The Institute of Education and Research of the University of Dacca offers Masters and Doctoral level programmes. The Bangladesh Education and Extension Research Institute (BEERI) offers a variety of in-service courses particularly on institution management for principals of schools. The Academy of Fundamental Education trains primary school supervisors. Besides these there are teacher training institutions which offer education administration as a part of the courses.

The Bangladesh government has undertaken a review of the entire administration system to decentralize many activities. The likely educational reforms may introduce new training needs. A National Institute for Education Administration and Management is proposed to be established.

Burma: Building of an infrastructure for training of educational planners and administrators is still in a formative stage. There is no institution that offers formal programmes in educational planning and administration. The Institute of Education offers courses for Diploma, Bachelors and Masters degrees in education. Education administration courses offered in these programmes deal with topics like structure and functions of administration, problems of educational administration, principles and techniques of supervision, comparative education systems etc.

India: The National Institute for educational planning and administration have been playing a significant role in training educational planners and administrators. Their programmes cover a variety of education managers including State Education planning officers, Directors of education, District education officers, Principals of schools and colleges, University vice-chancellors, Deans of schools and Heads of departments, etc. The programmes also deal with general management as well as specific issues like financial management, adult education, community relations etc. Besides the staff college a number of university departments of education offer special courses at Master's level. In addition every state has a State Institute of Education or a State Council of Education Research Training which conducts in-service training for heads of institutions, inspectors of schools etc. In the last five years the Indian Institutes of Management and the Administrative Staff College of India have also started developing specialized programmes in education management. Inspite of involvement by so many institutions there is a continuous need felt to develop newer technologies for education management and disseminate the same. The existing programmes can not even meet the current requirements due to vastness of the education system.

Indonesia: Five units of the Ministry of Education and Culture have been involved in training in educational planning: Centre for Personnel Education and Training, Bureau of Planning, Bureau of Personnel Administration, Innotech Centre and Centre of Data, Statistics and Conception of Office of Educational and Cultural Research.

The programmes offered for Educational Planners and Administrators include: training in educational planning for senior staff and for junior staff respectively, training for heads of provincial offices and planning units, and correspondence course in educational planning for junior staff. The topics covered in these programmes include: foundations of educational planning, data and diagnosis systems, formulation of five year plans, annual planning mechanisms, research in educational planning, information systems, allocation and location of schools, etc.

Since in its five-year plan Indonesia is attempting to realize the principle of equitable distribution aimed at the creation of social justice, the training in educational planning is also being re-examined

to support this orientation. A team has been working on formulating a design to develop planning in education and culture.

Korea: Planning and Management Office (PMO) in the Ministry of Education is responsible for overall activities of educational planning. At the provincial level, the Board of Education has a division in charge of local educational planning. These organizations do not undertake any training. The Korean Education Development Institute (KEDI) has been conducting workshops on regional education planning.

Since the government officers in the Ministry, Board of Education and Office of Education, general administrators, and professional personnel like supervisors and education researchers lack professional competencies in many instances there is a strong need for continuous training.

Malaysia: In Malaysia no systematic attempt was made in the past to train educational planners and administrators. About 3,000 head teachers had attended a one to two week course in educational administration upto the end of 1979. With the establishment of the Malaysian Education Staff Training Institute (MESTI) in 1979 efforts are being made to train administrative staff at all levels. A comprehensive training strategy is being planned. Over a 5-7 year cycle MESTI expects to train about 8,000 heads of primary and secondary schools, 1,200 central and state level planners, and administrators, about 17,000 deputy heads of schools, teacher training colleges and departmental heads of schools and colleges, and about 18,000 administrative support staff. The staff of MESTI are attempting to develop training content in areas like school leadership and supervision, educational management, educational training and research, evaluation, training technology, resource utilization and dissemination. A major problem encountered by them is in developing a proxiology of educational planning and management.

Nepal: The Planning, Programme and Budget Division of the Ministry of Education, the National Education Committe, the Evaluation Division of the Ministry of Education, Regional Education Directorates, District Education Officers and the Tribhuvan University and Department of Higher Education Planning are some of the agencies involved in educational planning in Nepal. There is an increased trend to decentralize educational planning to operational levels to increase participation and active involvement of implementors. The Institute of Education of Tribhuvan University has been offering formal courses in educational planning and management at degree level. Recently a centre for Educational Planning and Management was established for organizing short-term programmes for head masters, educational supervisors and regional subject specialists. The Ministry of Educationa and the Institute of Education have been involved in training secondary school supervisors. They trained about 90 supervisors in instructional supervision.

Pakistan: Since 1973 education has become concurrent subject of the federal as well as provincial governments. A full-fledged Bureau of educational planning under the Ministry of Education has the responsibility of training personnel in educational planning, besides co-ordinating planning and disseminating information on educational innovations.

Pre-service training is offered by colleges and universities conducting Bachelors, Masters and Doctoral programmes. There are several institutions offering such programmes (over 80) for different levels. However, specialized in-service training in Education Management is offered by the National Institute of Public Administration and the Administrative Staff College, the Provincial Planning and Development departments, Provincial Education Extension Centres, and Alabama Iqbal open university which offers correspondence courses in education planning and management. Apart from these there is no specialized centre for training educational planners and administrators.

The national education policy of 1978 envisages the establishment of an Academy of Educational Planning and Management to train education managers.

Papua New Guinea: The Staff Development Unit (SDU) of the Ministry of Education, Science and Culture, the Teacher Training Colleges, and the University of Papua New Guinea are the agencies involved in training education managers. Though strong need for educational planning to meet provincial needs is felt, the training function is being handled centrally. The recipients of educational administration programmes so far have been senior headquarter staff, provincial superintendents, primary/secondary inspectors, principals of schools and technical colleges. Generally they are trained through full-time in-service training programmes. Part time programmes are also available. These programmes vary in duration from one week to two years. So far about 2,000 candidates received training of some form or other in education management.

Through a recent project conducted in collaboration with IIEP, training needs have been identified which may give direction for future training.

Philippines: In the Philippines the trend is to move towards decentralized planning. Efforts are being made to rationalize planning at sub-regional levels. Training in Education Planning and Management is to be geared in this direction. The Ministry of Education and Culture and some institutions of higher learning and voluntary agencies are involved in training.

A notable feature of training in Philippines appears to be the focus on issue-centred training. Training is given whenever there is a need. For example when a text books project was initiated all administrators were trained through echo training in management of text books. As the decentralized planning programme is pursued in initial stages through a project to focus on depressed, disadvantaged and underserved areas, the school principals and supervisors are trained through seminar-cum-workshops.

Besides these the Education Management Centre of the Graduate School of De La Salle University conducts a M.Sc. programme in Education Management. The graduate school of Xavier's University offers a Master's programme in college or University Administration. The University of Philippines also offers Masters level programmes in the area. The Philippine Association for the Development of Education

Management and the South-eastern Asia Inter-disciplinary Development Institute also offer programmes in education management. Public school administration, school planning, management of private institutions, school mapping, project development and evaluation and statistical tools and techniques are some of the areas where training needs are experienced.

Sri Lanka: The staff college for education administration at Kalutare is the premier institution for training educational managers. The university departments of education at the University of Colombo and Peradeniyan offer optional courses in educational management. Other institutions like the Sri Lanka Institute of Development Administration, and the National Institute of Business Management also provide training facilities although they do not specialize in education management. The staff college has been conducting 2-4 week programmes for different categories of officers involved in education management including Regional Directors of Education, Circuit Education Officers, Principals of schools, Public relation officers and other officials from the Ministry. Correspondence courses are also being planned by the institute starting from 1980.

Thailand: Educational planning in Thailand is focussed on eliminating regional inequalities of opportunities, intake rates, wastage rates, progression rates etc. and to obtain more local participation. The Education Planning Division and the other departments under the Ministry of Education have been involved in training education planners and managers. Short pre-service training for regional and provincial education officers, education planning workshops at school, district levels, provincial and regional levels and in-service and pre-service programmes in education management are organized by the Education Planning Division. Two of the universities in Thailand offer Masters degree courses in educational administration.

In Thailand, the Centre for Education Administrators (CEA) has been established since May, 1979. The main function of CEA is to train educational administrators at all levels in the areas of educational administration and management. This project gets some financial support from the World Bank Loan.

Chapter Three

IMPROVING MANAGEMENT THROUGH TRAINING

Training can do certain things and can not do certain other things. It is important to know the limitations of training. Unrealistic expectations from training may result in overlooking the organizational problems which can not be solved by training.

Role of training

Improvement of planning and management of education depends on a number of things. Among these are the following:

1. Clarity of educational objectives at the macro and the micro levels.
2. A thorough understanding of the learning process and abilities of different categories of people.
3. Availability of accurate data.
4. Development of appropriate educational services delivery systems including infrastructural facilities, human resources, organizational structures and processes.
5. Devlopment of appropriate monitoring systems and self-renewal mechanisms.
6. Availability of human capabilities to man critical roles and provide leadership.
7. Socio-political environment and other situational factors.

Planning may become faculty if educational objectives are not clear. Clarity should exist at the national level, the regional level as well as the institutional level. Educational planning is concerned with questions on the manpower requirements in a country in different occupations for its balanced development and the areas in which changes are needed. Training in planning and management of education will help in answering these questions. However, various other factors determine answers to such questions. Political decisions and environmental factors are two important sources of such factors.

The effectiveness of educational planners also depends on proper understanding and insights of problems and related phenomena. Physical and social scientists provide these. If these understandings are faulty the plans may go astray. For example, in the National Adult Education Programme which was very well designed in India, overlooking

a minor factor about the learning styles of adults created a problem. The Adult Education Centres were supposed to cater to the age group 15-35 years. However, it was found in some places that a centre was started with a large number of adults of the age group 25 and above. Slowly the centre attracted a number of non-school going children, most of them below 15 years. The adults between 20-25 years dropped out as they would not like to sit along with children and learn reading and writing. The planners had ignored this probability.

Effectiveness of planning depends also upon availability of accurate data. Planners themselves can not collect date. They are supported by professionally-trained people who collect and supply information. While data collection techniques are fairly well developed, collection of certain kinds of data, particularly from rural areas, becomes very difficult. Most often such data are unreliable. Planners can be trained to be sensitive to the quality of data but they can probably do little about this problem.

Similarly, educational administration can be made more effective through training, but various other factors also contribute to its effectiveness. The effectiveness of educational administrators depends on the factors like the following:

1. The extent to which clarity exists on institutional objectives and tasks, and the flexibility the institution has in defining or redefining their objectives and setting their tasks.
2. The organizational structure.
3. Availability of the infrastructural facilities and other resources.
4. The organizational processes and dynamics, including the norms, social and political processes of the organization.
5. The type of students, faculty and support staff.
6. The social and political systems in the immediate environment of the institution.
7. The leadership and managerial qualities of the head of the institution.

Leadership and managerial capabilities can be developed and improved through training and other strategies. It is a common experience that dynamic managers and leaders in education are not uniformly successful in all educational institutions. One principal may do well in one school and fail in another school. The same is true of the Vice-chancellors of universities or educational officers. Developing managerial capabilities of an educational administrator may help him to give new directions to the institution or to plan the institutional activities in a focussed way. However, this is possible only if the institution has autonomy and the head of the instituion has the freedom. Unfortunately, in many countries with strict government control and over-concern for uniformity, institutions can not give new directions to their programmes. Thus the effectiveness of training in

educational administration depends partly on the amount of autonomy of the institute.

The same is true with organizational structure. By prescribing a uniform organizational structure the government may create constraints for innovative educational administrators. Training educational administrators may help to a limited extent in ensuring effectiveness of the institution through designing innovative structures, having control over faculty and student selection and ensuring availability of resources. The institutional head can do very little about the social and political forces acting on the institution except through responding to the positive forces and insulating the institution from undesirable forces. He can influence the institution by generating new processes and new dynamics in the institution. He can help encourage innovativeness among faculty, create a healthy atmosphere and use student and faculty talent for the institution. Training can certainly help the administrator to develop his analytical, diagnostic and intervention designing capabilities. However, the use of these capabilities depends on the general culture and autonomy of the institution.

Thus, it should not be expected that by training some administrators the effectiveness of the system will be instantly accelerated. At the same time one need not become pessimistic about training. Training can help a slow change by developing new capabilities in people. For example, if all the head masters are trained in re-orienting school curricula to local needs, and designing new systems of education, educational change can be smooth and successful. Their capabilities would help them respond and facilitate the change process.

The training institutions (formal or informal) have a role in the recent trends in educational planning and management such as decentralized planning, participative management, non-formal education, local orientation etc. Training institutions should recognise this long-term possibility and should not be disappointed if the training does not result in immediate changes.

The following could be some of the broad objectives of training in educational planning and administration.

1. To familiarize participants with the planning process, dimensions and techniques of planning or to develop planning skills.
2. To equip participants with the techniques of education management at institutional level or educational administration at a larger unit (e.g. district) level.
3. To develop analytical abilities, and diagnostic skills of educational problems.
4. To develop decision-making skills to improve quality of decision-making.

These objectives could be further narrowed and specified in relation to a particular client group.

Improving effectiveness through system development

Training can also stimulate to development of new systems. The examples are cited below to illustrate this.

In a programme on managing change in academic institutions a principal of a private school in India came with a problem of role stress due to work-overload. His school was located in a city having a number of government offices. As most officers were transferred, there were continuous pressures on him to admit new students throughout the year. Parents kept meeting him with recommendations and there were political pressures for admissions. He was kept busy dealing with parents and consequently he could not spend any time with teachers to give them guidance or think about student problems and develop machanisms for improving school performance. During the programme with the help of other participants he analyzed his role and discovered that more than 50 per cent of his time was taken by student admissions. By the end of the programme he left with a determination to design an admission system that would introduce objectivity, and would release his time.

In another general management programme for educational administrators of a State Department of Education in India, the participants (Deputy Directors of Education, Districe Education Officers (DEOs) and Training college principals) identified about ten problem areas that were preventing them from being effective. For example the Deputy Directors and DEOs complained that about 80 per cent of their time was taken up by teacher transfers. Consequently they were not able to spend time in giving guidance to and supervision of head masters of schools or planning other educational activities. Another problem presented was that of the difficulties experienced in locating new schools. A third problem experienced by the principals of teacher training colleges was scheduling of various activities. The Director of Education, who spent the last two days of the programme with the participants, was appraised of these problems. All the officers, along with the director, who saw the computer model developed at the Institute (where the programme was held) for locating service facilities in rural areas requested the institute to help them. The institute faculty was involved in studying the problem and developed computer models for teacher transfers as well as school mapping. These new devices may save a lot of time of the education officers for other useful activities. However, introducing the computer models require policy decisions, and these are being considered by the department of education. The training college principals have worked out a PERT (Programme Evaluation and Review Technique) chart of their activities and discovered that it is possible to conduct all the activities with ease by proper scheduling.

These two examples make it clear that training in educational administration can help in developing management systems resulting in economy of time and effectiveness. The examples also indicate that with availability of follow-up support from the participating institutions it is possible to initiate change and increase effectiveness of educational planners and administrators.

Part B

PLANNING AND ORGANIZING TRAINING

The role of a trainer is not confined to instructing in the classroom only. He works out a training strategy, identifies training needs using different methods, identifies learning activities, sequence them, selects training methods, organizes training, evaluates its impact, and redesigns the programme in the light of the evaluation and feedback. This managerial role of the trainer is as important as his instructor role. Six chapters have been devoted in this part to deal with several aspects of planning and organizing training.

Chapter four is focused on training strategy, discussing four elements on which a training strategy should focus: developing a linkage between the training institution and work organization, pre-training preparation, the training per se, and post-training work.

Chapter five discusses the techniques of identifying training needs. About 13 different techniques of identifying training needs have been described. Experiences of identifying training needs have been presented in the form of cases from Papua New Guinea and Nepal. A list of training needs as identified by education managers from different countries has also been presented.

Chapter six focuses on modular approach to curriculum development. After discussing the advantages of the modular approach, guidelines for designing, writing and testing modules are presented. A list of modules appropriate for different categories and levels of education managers has been given with some details of modules available in different countries.

In the chapter on training modalities and methods (Chapter seven), a few methods of classifying the modalities have been suggested. Some criteria for selecting the modalities are also suggested, followed by a presentation of the typology of training methods. These criteria can guide the selection of training methods.

Chapter eight presents some aspects of organizing training and a training institute:the need for consistency, the importance of trainer values and behaviour, the value of active participation, and the process of institution building and action research.

The last chapter of this part (Chapter eight) on "Evaluation" discusses various aspects and issues in the evaluation of training, followed by a presentation of some instruments for evaluation.

The focus of all the chapters in this part is on elaboratin the training process as a dynamic, integrated and a continuous act ity This is the reason why the chapter titles are in verb rather than noun form.

Chapter Four

DESIGNING A TRAINING STRATEGY

Training essentially is an instrument of change, an instrument to bring about desired changes in an organization. A strategy to use training effectively for organizational change aims at maximizing the benefits from training. The strategy, among other things, enhances mutuality between the organizations like the state departments or institutions where changes are planned, and the training set-up like training institutions or university departments where training is conducted. The responsibility of utilizing training effectively lies both on training institutions as well as the organizations which are using the training. Thus training integrates what is being taught (contents of training) and where such training will be utilized. The strategy, therefore, has to be planned at both levels - at the level of the training institute and at the level of work organizations.

Training strategy needs to be planned at various levels. Some countries are large enough and they are divided into various states and other sub-parts of a state like provinces, etc. In such countries, the training strategy may be planned at various levels; e.g. the national level, the state level, the provincial level, the district level and at the level of a particular institution. The strategy planning will be different at different levels. What we are discussing in this chapter may be generally applicable to smaller units like a state or a province where training strategy needs to be planned directly with training institutions.

There are four areas in which training strategy needs attention. In the first place, a stronger linkage needs to be developed between the training institutions and the work organizations. Various ways may be found out to build this mutuality, the linkage between the trainers and the users. The other three foci of the strategy deal with the process of training. Using the famous Lewin's model of change, training will have three phases - unfreezing, moving and refreezing. These are pre-training phase (what happens before the actual training takes place), the training phase (what happens during training) and the post-training phase (what happens after the training has taken place). The main purpose of looking at training in a three-phase model is to understand

the forces which help the training to become more effective. Unless enough attention is paid to what happens before training takes place we may not be able to achieve full benefits from the training. Similarly, we have to consider what happens after the formal training is over. This will help to stabilize the effects of the training. These three phases are also the three foci of the strategy. The strategy, in short, has to deal with these three things: building linkages between training institutions and work organizations, ensuring pre-training preparation, and ensuring post-training work.

1. Linkage building

The building of mutuality between the organizations and the training institutes is primarily concerned with developing a partnership between the two important sources of organizational change. The follow-int three common areas need attention in this regard.

a) Involvement of the training institution: The training institute can not remain contended only with the training programmes. It has to increasingly get involved in organizational objectives and problems. The best model of such involvement is what is known as organizational development (OD) or action research (AR). Both OD and AR help the training institutes to get involved in solving the problems of the organization. The role of a training institute may be to function as a consultant to the organization on problems requiring innovative approaches and new ways of solution of problems. In OD and AR the training institute gets involved in the problems on the request of the organization. It not only works on the specific problems, but helps to build a climate in the organization to improve various ways of solving the problems. The typical OD approach is to study an organization or an autonomous part of an organization in details, including the survey of its climate, and then work with the people in the organization to improve various aspects. OD focuses on the total system, involves the head of the organization in the change programme, and works on the basic processes without which organizational problems may not be effectively solved. Such processes would include those of team building, decision making, conflict management, improving the general culture of the organization, changing attitudes of the people so that they would be able to build mutuality and involve more and more people in solving the problems. Training institutes may be required either to design some specific systems in the organizations like a specific information or control system, or an appraisal system, etc., or, the organization may need the help of the training institutes to look at the specific problems and work out some alternative solutions. For example, in a district, the district administrator may like to pose the problems of how to increase enrolment of students in the schools, how to involve the community in school managment, how to increase the motivation of the teachers in getting

involved in adult education, etc. Whether the training institute works with a larger problems or with such specific problems, its involvement in the organizational problems helps both the organization to search new solutions and the training institutes to get more and more experience in relation to organizational problems and collect new training material which will make training more effective.

b) Involvement of the work organization: The work organization has to be actively involved in making training effective. The state government departments can not remain contended only by starting a training institute, or deputing administrators to the institute for training, or getting the help of the institute in distance training of their administrators. The work organization has to actively seek the help of the training institute. On the other hand, it should also contribute to make the training effective. It may be a good idea for some administrators to get involved in various aspects of the training programmes. For example, the training institute may involve administrators in discussing the objectives of the training programmes, the training syllabus, details of pre-training and post-training requirements, etc.

Most training institutes invite people from work organizations for lectures and discussions. This involvement may not be sufficient. It is certainly good to invite people from work organizations for providing some training inputs. However, unless enough preparation is made such involvement may deteriorate into a series of lectures which are disjointed, do not properly get integrated and may have only marginal usefulness. A better model of the involvement of the work organization may be to have some persons from the organization work with the training institutes for a period of time. This can be done by deputing some people to join the training institutes as regular memebers of the faculty. This may help to refresh the training faculty from time to time. Usually, the departmental institutes have such an arrangement. But this can be done even in the university departments and institutes, by inviting qualified administrators, to spend some months at least both to contribute the understanding of the problems and to get directly involved in some aspects of training.

Similarly, people from work organizations may be involved in the development of the curriculum. Even when people are invited from the work organizations for training sessions, this may be planned in advance, and instead of involving them only in delivering a lecture or a series of lectures, they may be helped to design the various inputs. The training institute should provide the necessary preparation and guidance for this purpose. The more the outsiders are involved for a shorter period of time, the more thorough should be the preparation to make training effective.

2. Pre-training aspects

Training strategy would involve various aspects of pre-training work. It is necessary both for the training institute and the work

organization to pay attention to what needs to be done before a training is organized. At least the following three dimensions need attention in this regard.

a) Goal setting: Before the start of the training it is necessary to be clear about what the training is meant for. The goals need to be set by the organization, and the training institute can play a role in helping the work organization to look at these goals or objectives. The work organization should be clear about the objectives, for which the training is being planned or used. Should these objectives be concerned with what is happening at present, or should they be concerned with what is likely to happen in future? The objectives of training link the present with the future. While the focus may be on increasing effectiveness at present, an objective also takes into account what is also likely to happen in the future. The training equips the people not only for the effectiveness of today, but also tries to make the roles effective for tomorrow.

   The training institute on its part can help to examine how realistic the objectives are, and it can raise questions about some other dimensions of the objectives which might have been overlooked by the work organizations. Usually it may be useful to have groups in which both the representatives of the work organization and the training institute are involved to discuss in details various objectives and decide and finalize these for purposes of translating them into training needs. We shall discuss this in more details in chapter five.

b) Selection of participants: The selection of participants is not a simple matter. Usually when people in a work organization come to know about a training programme they depute some persons who they think need the training. This approach is a very simple one and does not lead to effective use of training. In formulating a training strategy such questions should be taken into account: who should be sent for training, in what numbers, in what sequence, etc. While deciding on such matters the main consideration should be how the changes which are planned will effectively be implemented in the organization. This may, for example, require a strategy of sending people from different levels in two or three programmes, or in the same programme so that enough concentration of people can be achieved at various levels. Similarly, it may be necessary to consider whether sending one or two persons to a training programme is sufficient. Sometimes a group of people attending a training programme may make the training more effective when they return to the work organization. Training can not be effective unless there is a minimum critical concentration

of people who have undergone training. In the absence of such a critical mass those who undergo a particular training may soon get discouraged; whatever they have learnt gets lost, because they do not have enough people to sustain the same attitudes and changes which they had learned during their training programme. This particularly happens when people are sent for special training like one involving attitude change. A minimum concentration of a group of people for such training may be necessary. The strategy may also consider the question of how a large number of people can be trained in a short period of time.

Selection should also be concerned with the method of selecting people. For examples, different motivations may be generated in nomination to training as against volunteering for training. Even if people are nominated for training some means may be found to help them volunteer and express the difficulties they envisage while they are sent for training. Helping people to understand that they are going for training for their own benefit, and that the organization expects them to use the training effectively, may help the participants benefit from the training programme. The work organization should take help of the training institute in deciding such a strategy.

Selection may also involve the discussion of the strategy of how many people will be sent to which programmes and in what sequences. This is being done in some work organizations in order to ensure that while people are sent away for training, the work of the organization does not suffer. However, very little attention is paid to the questions as to who are the critical role occupants to benefit from this training, and who should be trained subsequently to make effective use of training. A total strategy of training of various people at various levels in the organization needs be prepared in advance with the help of the training institute.

c) Pre-training motivation: The third dimension of pre-training work concerns with raising and ensuring pre-training motivation of participants. Several methods can be used to ensure that the participants may come psychologically prepared to benefit from the training programme, and then contribute to its proper development. Various approaches may be used for this purpose. The persons from the training institutes can visit the work organization and may meet different people there in order to understand on what problems work needs to be done during the programme. Such general meetings may help in increasing expectations from the organizations about what is likely to happen as a result of the training.

It may be useful to do some work with the prospective

participants of the training programmes. This may be done by organizing pre-training workshops and meetings with such participants. The meetings and workshops may be short to help the prospective participants have a pre-view of what is going to happen in the training programme, understand what preparation they need to make, and develop appropriate expectations from the training. Such workshops and meetings may also help the training institutes to get ideas about modifications to be made in the curricula which they have prepared.

Pre-training preparation, leading to greater motivation of the participants, may also involve collecting data which can be used during the training programme. This can be done through surveys on the problems the participants are facing in their work role. For example, supervisors training may be preceded by a general survey of the problems which the supervisors face in their day-to-day supervision about which they would like to do something. Such survey may help the training institute to classify these problems and take them up during the training programme to ensure that enough help is given to the participants to understand these problems and evolve alternative solutions. The surveys may also include specific individual problems on which work may be done. People may like to express their desire to learn specific things. Such surveys are helpful in making the training institutes aware of expectations of the participants.

The training institutes can take steps not only in getting expectations from participants, but may also communicate the expectations of the training institute from the participants during the training programme. It may be made clear, for example, that the participants will be required to complete some readings before they arrive for the training programmes. Or, that they should collect some information and write out some cases or problems which will be used during the training.programmes.

3. Post-training dimensions

The training strategy may also involve planning what may be done after the training is over. In most cases the participants themselves do something after their training is over. It is expected that they would use the training in their roles. This may be a very passive attitudes and may not make training effective. For some time the participants may be enthused with what they learned, but eventually they get lost in the normal work in the organization, and end up with some pleasant memories of the training they received. Certainly some benefit is derived and used from such training programmes. But most of the effects of the training may be washed out. A more systematic attention needs to be paid to post-training dimentions. The following three aspects need consideration:

a) Transition from training to work: Towards the end of the training programme the training institute needs to ensure that the participants after their return to their work roles will properly use the training they received. The last part of the training should be focussed on such a transition. It is necessary to build a balance between the desire to produce change in the organization, and the reality of introducing such a change on a limited scale. The participants should go back prepared to take the organization forward, to contribute their small share to help the organization achieve its goals. But they should also be aware of the reality. Therefore, this balance between enthusiasm and awareness of limitations, between optimism and realism, may be necessary to help the participants become effective. Many training institutes do this by working on specific problems of the participants, and to help them prepare action plans in which the various learnings from the training are properly used. The last phase in the training programme, may, therefore, help the participants to integrate their learning into their work roles. In some training institutes people from work organizations are invited towards the last phase of training to interface with the participants, both listening to what the participants have to suggest, and to react to these ideas and raise some other questions. Such a dialogue with the next level of officers from work organizations in the training institutes may help the participants to understand the views of their officers, and motivate the officers to utilize the training properly.

b) Post-training support: The participants after return to their work place need to be provided necessary support to utilize their training effectively. Such support may include the expectation from the work organizations that the participants will share their experience of their training with others. Some organizations have a practice of inviting the participants, after their return from the training, to share with their colleagues what they learnt in the training. This can be done in a seminar where they report some details of the training, and also raise questions how their training can be utilized. This can also be done by working with the participants in more details; they may sit with their officers and may spell out what they have learned and what they would like to do in the organization.

The support may also ensure that the participants are able to utilize what they have learnt. In some organizations the participants may be given an entirely different role from what they learnt during the training. This may result in wastage of training and demotivation of the employees. It may be useful to discuss with the participants what kind of changes they would like to make, and to ensure that they have a role in the organization where they can experiment and make attempts to bring about some changes. The officers can also

communicate positive expectations from the participants. Such expectations may help the participants think how their training can be utilized.

A follow-up by the organization, and by the training institute, wherever it is feasible and required, may ensure that the training is properly utilized. It may be a useful practice to review every three months or one year at least, with the participants of various programmes, how they have been able to utilize the training, to what extent the training has been useful, what the organization has done to help them utilize this training, and what the organization has not been able to do which they wish could be done further so that they could use their training effectively. Such reviews may help the participants to be alert in using their training, and it may also help the organization to take necessary steps to ensure more effective use of training. Such reviews may also help the organizations plan what support they need to give to the participants.

c) Evaluation: Evaluation is one of the most difficult aspects of training. Evaluation helps in making training effective, because it generates data both for the training institutes to improve their training programmes, and for the work organization to understand why training is effective, and how training can be made more effective. Evaluation will be discussed in more detail in a later chapter. Here it may suffice to mention that evaluation is a necessary part of the planning of training strategy. And also that evaluation has to be jointly done by the training institute and the work organization. Both should be equally concerned with the effectiveness of the training. Some parts of evaluation help the training institutes in increasing their effectiveness, and some parts help the work organization in properly planning the utilization of training for its own goals.

Chapter Five

IDENTIFYING TRAINING NEEDS

Identification of training needs is the starting point for a training programme. Systematic identification of training needs goes a long way in improving the quality of training. Unfortunately today, most often, training programmes are arranged without paying much attention to the systematic identification of training needs. Identifying training needs helps the following:

1. determine the training objectives,
2. design the curriculum and identify teaching content,
3. select training modalities and plan a training strategy,
4. define clientele and select trainees, and
5. evaluate training.

In every country a variety of functionaries are involved in educational planning and administration. The functionaries, to be effective, need to have some knowledge, skills, attitudes and orientations. Before a person takes over a particular role, pre-service training or pre-placement or pre-promotion training should help him to acquire these capabilities (knowledge, skills and attitudes). However, after he occupies the position for some time it is possible to find out the gaps in his capabilities through an evaluation of the functions he performs, the results he achieves and problems he experiences. Thus training needs may flow from an analysis of the job and the functions associated with the job, and analysis of the gaps in performing the job effectively by a set of people occupying those roles.

Training needs may also be suggested by the change in the nature of functions of an education manager. In this chapter some techniques that can be used for systematically identifying training needs of educational planners and managers are suggested. Some of the guidelines offered by the IIEP, Paris are also presented. This is followed by a discussion of the implications of the new emerging education policies and concerns for identifying training needs. A sample list of broad training needs identified for different categories of education managers is also presented at the end.

Techniques of identifying training needs

1. Analysis of job performance or job-related activities

A thorough and systematic analysis of the activities associated with a given role may throw light on the training needs. For analysing training needs through activity analysis the following steps may be followed.

a) List all the activities in which the role occupant (position holder) is likely to be involved. List in as many details as possible.

b) Make estimates of the time spent in each of the activities.

c) Group these activities into meaningful categories.

d) Compute time spent in each of the categories by adding time spent on different activities.

e) List for each category of activities all the capabilities the person should have in order to perform that category of task. The capability may be listed in detail under

   i. knowledge or information that is required to be possessed for performing this set of tasks well,

   ii. skills required to perform these tasks,

   iii. attitudes, values or orientations required to perform the set of tasks well. For administrators these may be in technical areas, administrative or managerial areas, or in behavioural areas.

Such an analysis of the job is useful for many purposes including recruitment, placement, promotion and training. It may suggest areas where gaps exist and thus the training needs.

Such an analysis may be done using available records, documents job-descriptions, and questionnaire, interview and observational studies of people who are performing the job. Analysis of the documents relating to the job on how it was planned, how to change over time and what is its content now is some times sufficient to throw light on training needs.

2. Analysis of problems

Analysis of problems faced by different role occupants may give insights into their training needs. These problems need to be surveyed and the common problems should be identified. Different methods can be adopted to survey the problems.

A mailed questionnaire may be sent to a sample or all of the occupants of a particular role. The questionnaire should be in a structured form as far as possible. It may list different broad functions expected or generally agreed to be performed by the role occupant. Each respondent may be asked to list all the problems he faces in relation to each of the functions. Wherever possible the respondent may also give illustrative cases or incidents to highlight the problems. From an analysis of responses received from such mailed

surveys common problems and areas deserving more attention in training can be identified.

Mailed questionnaires have the disadvantage of poor response rate. In addition there may be ambiguous or categorical listing of problems which may not help the trainer in identifying the exact nature of problems. Hence a better method may be through personal interviews. Personal interviews with a sample of potential trainees may help in identifying training needs. In personal interviews there is scope for probing further to understand the problems in depth. The interviews could also be structured. An attempt could also be made to collect problems faced by the respondent in relation to each function.

A combination of the use of questionnaire and interview techniques is very well illustrated in the efforts made in Papua New Guinea which is described later in this chapter.

3. Diagnostic workshops

Diagnostic workshops are organized to identify the problems and mechanisms of improving a system or subsystem of education as a whole. Groups of officers of the same level in the hierarchy can be invited. For example, a group of head masters may be called for one workshop to diagnose the problems of school management and mechanisms of improving school performance. Another workshop of the school supervisors may be called separately. Thus different levels may be involved. The discussions and diagnoses by the headmasters may give clues about the training needs of

a) the head masters themselves,

b) the assistant head masters,

c) the supervisors and

d) possibly higher level authorities or education planners.

Similarly, insights thrown by the supervisors on the training needs of their head masters may become a good supplement to the list of training needs identified in the head masters' workshop itself. In such workshops, it may be useful to devote a few hours or at least a specific session to identification of training needs. The participants can discuss and list out not only the training needs for their roles but also for officers at one level above and a below them.

4. Studies of good and poor performers

In a department there are a few highly effective and a few poorly performing educational administrators. Analysis of the differences between the two groups may give insights into the training needs. Studies of the differences may be made by using observation, interview and other techniques. Analysis of the differences should focus on level and nature of knowledge, different skills needed to perform each function, and orientations to tasks.

Such studies are not easy to conduct. Particularly there are problems involved in identifying good and poor performers.

5. Interviews with the role set.

The role set (of a particular role) consists of all those who have expectations from that role and those who interact with the role occupant. For example, the role set for a school principal consists of the students, parents, faculty, administrative officer or office superintendent, vice-principal, the school supervisor and the board of management. Interviews with samples of respondents drawn from each of these groups may indicate areas of training for school principals.

6. Observational Techniques

Observation of on-the-job performance of the potential trainees is another method of determining training needs. This method is rarely used due to the difficulties involved in observing on-the-job performance. In this method an observer (generally the trainer himself or a researcher) interviews the potential trainees and spends a few days observing his activities. Approval of the respondent should be sought in advance. The purpose of the observation is to list all the activities in which the candidate is involved, the time spent on each activity, the styles of performing the activities, decisions made, the style of decision-making, problems, attitudes, interactions with groups or people, etc. These observation may suggest to the observer the nature of tasks performed, the nature of skills required to perform these tasks and gaps in the skills.

7. Performance appraisal reports

Annual performance appraisal reports also form a good source for identifying training needs, provided the appraisal system is a well designed one. Increasingly performance appraisal is being used more for employees than as a tool of control. If performance of education managers is appraised annually against their key functions and behavioural dimensions, performance analysis is done after appraisal, the appraisal data may provide enough inputs for training needs.

Even if a well designed system does not exist item-wise analysis of performance records where performance is appraised on a number of characteristics (e.g. leadership, co-ordination, technical knowledge, decision-making, resource generation etc.) is likely to suggest training needs.

8. Attitude surveys

Introduction of new techniques and innovations should generally be preceded by efforts to create supportive attitudes amongst administrators. For example, if a school complex programme is planned to be intorduced (in which groups of schools from a given geographic region form into a complex and help each other in terms of facilities etc.), it is necessary to ensure that the head masters and supervisors are positively disposed to such a programme. One initial step in this connection is the assessment of attitudes of such groups. This can be done through a survey. If the survey indicates misgivings about the

programme or presence of any negative attitudes, programmes could be organized to influence the attitudes. Attitude surveys may be conducted on various issues like community participation, vocationalizing education, population education etc. The emerging issues and other information will give ideas about training needs.

9. Reorganization or administrative changes

Whenever there is a re-structuring of the educational system and new roles are added or administrative changes are made, there may be a need to reorient the administrator to the change. In such cases the nature and the content of change would determine the training needs.

10. Newspaper and journal articles

In some countries 'letters to the editor' and public debates through newspapers etc. are highly encouraged. A careful follow-up of these essays, complaints and such other newspaper articles may indicate training needs. For example, if several parents complain about the education system or school management, they may indicate the need for having a relook at the system or the need for strengthening the capabilities of education managers.

Similarly concerns expressed through other forms like the teacher associations etc. may also provide insight for training needs.

11. Analysis of correspondence and decisions

Another source of training needs is the analysis of decisions taken by the administrator. An analysis of the previous files, notings, the decisions taken may give clues to the training requirements. Particularly the communication ability, diagnostic capability, administrative competence and decision-making skills can be assessed to provide suggestions for training needs. This technique is called 'in-basket' (because the 'basket' or 'tray' of an administration, containing various papers is examined). It is useful to limit the analysis of 'in-basket' to some period.

12. Brainstorming

Brainstorming is a useful technique in determining training needs. In this technique groups of people (a role set or homogenous groups related to a given role) are brought together. Under time contraint they are required to write as many suggestions as possible for training the target role occupants. They are encouraged to write anything that comes to their mind. After an exhaustive list is generated, the items are critically analysed, edited, and processed to get a final list of training needs.

13. Critical incidents technique

In this technique critical incidents that occur in the work-life of potential trainees are collected. Critical incidents include activities that have occured or keep occuring that are very important, that have been handled in innovative ways, or problems that are important that have been solved well or that could not be solved at all, or mistakes that have been made by the administrator, important but unusual

decisions taken etc. Such critical incidents collected from potential trainees may give training material wherever problems have been handled well, and material for training needs wherever problems are frequently occuring that need certain kinds of additional skills to handle them.

Usually critical incidents are collected by asking either the role occupants or members of their role sets to recollect an occassion when he was very effective (or individual who was very effective), and then describe the incident in details (what was the situation, who were involved, what was done, with what results) and indicate why this is cited as a critical incident. Similarly, critical incidents are collected for ineffective behaviour. These incidents are then analysed to give ideas about critical requirements (usually in behavioural terms) for the role These suggest the training needs.

14. Other techniques

Several other techniques can be used to identify and prioratize the training needs. Two such techniques are briefly mentioned below:

Small group discussions: Small groups can be brought together and given the task of listing additional areas of knowledge and skills that need to be developed for a given role. Such collective thinking may highlight training needs.

Prioratizing the needs: When a list of training needs is generated through a technique, the trainer may want to prioratize them. When the list is a long one, prioritization is necessary. It may help in deciding the content, weightages and duration of the programme. Training needs can be prioratized by rating or ranking.

A 5-point rating scale can be used. All the training need areas are listed and the respondents are requested to indicate importance of each item by giving a number from 1 to 5 i.e. 5 for the most critical or important, and 1 for the least critical area. A 3-point weightage system can also be used. Such ratings may be obtained from the members of the role set. If it is not possible to get ratings of all members of the role set, ratings may be obtained from the higher level officers. Ranking or card sort technique can also be used. Members of the role set or the supervisors of the role occupant whose training needs are being assessed may be requested to sort out the cards that indicate the critical training needs. Alternatively they may be instructed to arrange them in order of importance, putting the card representing the most needed training area first. Such ranking by a number of respondents could then be tabulated to find out the priorities.

Emerging educational policies and training needs

With changing policies in educational planning, and with the introduction of decentralized, provincial and participative planning and administrative processes, new challenges are being faced in the field of education management. To meet the new challenges and to facilitate innovations in education, new roles may be created. In such cases the new role occupants need to be prepared. For this purpose the methods suggested above for identifying training needs may not be applicable, as

the role does not exist. In such cases the group of experts who conceived the role should delineate the functions and responsibilities, and identify the knowledge, skills and attitudes required by the role occupants. These will directly give the training needs.

A good example of this process is the experience of Papua New Guinea when they introduced a new role of senior professional assistants of education planning. With the government's decision to transfer major educational functions to the provinces, the need for ensuring the availability of appropriate tools, resources and structures to provinces to ensure effective implementation was realized. As the focus of education was changing and new demands had already been made on the provincial superintendents to manage this new focus of education, it was felt that each provincial superintendent could not cope with the added responsibilities of assisting their provincial governments in decentralized planning. It was felt that the desire to narrow disparity in the provision of education services within and between provinces, the provision of equal educational opportunities between sexes, social groups and regions requires a reasonable understanding of the basic issues and concepts, specialized skill, personal committment and conscious planning. Assisting him with a trained education planner was felt as an appropriate mechanism to meet this problem. Thus a new cadre of senior professional assistants (planning) was created in the year 1979. He was attached to the superintendent of education. The following duty statement was prepared which gives enough clues for training needs.

1. The senior professional assistant assumes the responsibility for receiving and analysing monthly returns from schools within the system. Designs ways of preparing and disseminating statistical data on staffing, enrolments etc.

2. Monitors trends in staff level, staff attendence, student attendance, etc. and supplies to the superintendent.

3. Analyses the department's annual draft budget estimates for internal consistency and consistency with project objectives.

4. Develops inventories of school and population data, physical resources and other educational resources and updates annually.

5. Ensures that church and government agencies work together in all education planning matters.

6. Prepares forward plans and projections on staff and enrolments for consideration by the provincial superintendent and the education board.

7. Liases with other government departments etc.

These duties give rise to broad training needs centering round the following:

a) An understanding of the activities, structures and procedures by other departments.

b) Understanding of key problems like dropouts, inequalities in education etc.

c) Knowledge in statistics and demography.

d) Understanding of basic concepts and approaches to planning education development, economics, sociology and politics of education.

e) Statistical data analysis techniques, interpretation, project formulation etc.

Besides these, his analytical, creative, communicational and social skills need to be developed.

The task of working out detailed contents for a one-year programme to train them has been assigned to a training team and a select group of departmental specialists.

Introduction of new systems and programmes

Whenever new systems and programmes are introduced always new roles may not be created and the existing educational administrators may need to be re-oriented or oriented to lend support and to be able to monitor the programmes. In such cases orientation training is conducted. The training needs are determined in such cases by the nature of the programme or activity, information required to be passed on, skills required to supervise or manage the programme etc. Whenever skills already exist and the administrators are also familiar with the new programme or activity no specialized training programmes may be necessary. For example, if a new adult education programme is planned and the adult education centres are being managed by voluntary agencies and the District education officers have supervisory responsibilities, there is a need to train them in supervising adult education. This may require special training as a set of new agencies are involved and the nature of supervision may be different than the supervision they have been doing so far.

With the introduction of new programmes and change in policy orientations, training needs are being experienced in most countries. For example with decentralization and the desire to democratise social and economic opportunities the need to develop planning abilities from central to town levels is being experienced in the Philippines. Similarly with the establishment of the Ministry of Human Settlements, spatial dimensions of planning became important in the Philippines. Zoning or locational plans are currently being introduced. This requires spcial skills in school mapping.

Similarly in most of the Asian countries, new programmes and policies are continuously evolving. In such cases the exercise of identifying training needs should be done as far as possible by active involvement of those responsible for designing the new programme or function. Teams of experts or panels could be appointed to undertake this work. Some dynamic and innovative educational planners and administrators chosen from the group whose training needs are being outlined, should also be associated with this exercise.

By way of procedure, the following six phases, and various steps under each phase, may be suggested for a study of training needs in the field of educational planning and administration:

1. The initiation phase
   a) Stating the objectives of the study.
   b) Establishment of a research team.
   c) Definition and limitation of the study.
2. The first analysis phase
   a) Pre-study of work arrangements.
   b) Pre-study of problem areas.
   c) Seminar on the results of the pre-study.
3. The planning phase
   a) The design of the questionnaire.
   b) The design of the interview guide.
   c) Pre-test of questionnaire and interview guide.
   d) Drawing the sample.
   e) Briefing of interviews.
4. The data collection phase
   a) Dispatch and collection of questionnaires.
   b) Direct interviews.
5. The second analysis phase
   a) Processing of data.
   b) Analysis of the results from the questionnaire and the interviews.
6. The recommendation phase
   a) Recommendations concerning work arrangements.
   b) Recommendations concerning personnel policies.
   c) Recommendations concerning training of personnel.

Some training needs for education management

We shall indirectly suggest some training needs in the field of education management when we discuss the development of curriculum in the next chapter. In one of the country papers submitted in a Programme development workshop on "Educational Planning and Management: Trends, Developments and Needs", organized by Unesco/ROEAP in 1978, the training needs expressed in terms of content areas was mentioned as follows:

> Basic concepts in educational planning; educational planning and socio-economic development; economics of education; politics of

education; diagnostic techniques, student flows etc.; financial analysis; projection techniques-enrolments, manpower etc.; statistical data needed for planning (Data collection, data analysis, data interpretation, data presentation); formulation of a plan; programming and project finalization; PERT, plan evaluation (Project cycle, project appraisal, formative evaluation, summative evaluation, resource allocation), institutional planning and management; organizational development; principles and problems of educational management, systems analysis and design in educational management.

It is presumed that the actual choice of contents will vary form one training situation to another depending upon the requirements of the course or the individual needs of the participants.

Using the Delphi techniques, each participant in the workshop had to write down, in order to priority of attention (i.e. seriousness), three problems or problem areas for which he saw solutions through staff development by means of training and orienting personnel to achieve changes in attitudes (including human relations patters of behaviour), development of skills (including the capacity to use new techniques and tools) and to provide required knowledge base. The list of the training needs that finally emerged from this exercise is then tabulated. The analysis suggests the following needs as having particular relevance to the Asian situation:

1. Non-professional from outside the field of education particularly those involved at high policy levels should be given orientation suitable, so that educational planning could be effectively launched without unnecessary delays.
2. Developing skills in improved human relations, group dynamics and conflict management.
3. Inability to mobilize additional resources and failure to optimize the use of available resources (including time) and the consequent frustration that no progress could be made with the given resources and available opportunities.
4. Inadequate appreciation of detailed project formulation as the very foundation of the planning process and the need for planners to receive proper training in planning procedures, formulation and preparation of development schemes, etc.
5. Training should not only to impart knowledge of theories and principles written in textbooks developed by and for the developed countries' academicians. How these theories have to be modified in relation to the actual problems of the developing countries should given some thought before launching training programmes.
6. Initiation of regular studies on existing problems of planning and management and using them in training programmes.

7. Research through the awared of fellowships to bright young people should be conducted to develop planning and administrative principles suited to one's own country situation and its realities.

8. In the absence of norms and indices of qualitative growth, there is a tendency to concentrate on physical targets such as enrolment (as distinct from attendance), number of teachers (irrespective of their quality) and expenditures. To overcome this, it is necessary to develop meaningful indicators of quality and performance.

9. How can the efficiency and quality of education be improved even when there is a shortage of monetary resources or when lack of resources is often used as an excuse for inaction?

Some procedural guidelines for identifying training needs

Described below are some procedural guidelines prepared at the IIEP, Paris (Thorkildsen, 1976) for identifying training needs of educational planners and administrators. The study of training is suggested under six phases. The first phase deals with setting up objectives and finalizing the team members and strategy. The second phase involves preliminary investigation and preliminary analysis of training needs. The third phase is planning the final study. The fourth phase is data collection. The fifth is final data analysis and sixth is recommendations. The detailed steps under various phases are presented below.

1. Identify and spell out clearly the objectives of the policies for the development of education of the country as clearly as possible. This is essential to examine if the administrative system is tuned to the policies or not. It is important to take into account decisions, trends, or plans pointing to major changes and reforms in the education system.

2. It is useful to have a research team constituted to identify training needs. As far as possible the team should have participants from both outside and inside the units that are to be affected by the study. The team should have participants or consultants with the following competencies:

a) experience in most important tasks to be studied (e.g. educational statistics, budgeting techniques, project preparation, etc.);

b) experience in organizational analysis;

c) experience in the organization of various types of training programmes in the field of educational planning and administration (possibly from different training institutions).

All these people are not needed at every stage of the study and their linkage to the team could consequently be more, or less permanent.

3. The most important element in developing a realistic study proposal is the specification of those work sectors and personnel categories that are to be included in the study. Whilst it may have been clear from the beginning that the study should be oriented towards, for instance, the personnel working in planning units at various organizational levels, it is normally not clear who, within these units, should be studied, in functional as well as personal terms.

A second important element is the decision as to how far-reaching (and how detailed) the study should be. Should it define training needs in aggregate terms or should it deal directly with each function or person? Further, should specific training programmes be suggested, or should this be left to others to propose?

4. Once the study proposal has been agreed upon, task structure and work arrangements in the various parts of the educational system are to be understood. Manuals, plans, directives etc. may be helpful for this purpose.

5. Any change in work procedures, for instance, the introduction of new planning model, must be analyzed both in terms of the necessary modifications of job descriptions for the personnel already working as well as the creation of new jobs resulting from the changes.

The pre-study of problem areas must be oriented towards both of these possibilities.

The point of departure should be that lack of adequately trained personnel may only be one (and frequently a minor) constraint to a satisfactory functioning of planning and administration of educational services. Other problems may be of a much more severe character and this is why a global analysis of existing contraints is essential before starting the specific analysis of the training needs.

These constraints should be identified preliminarily on the basis of prior studies, work documents and through informal interviews with people representing different points of view/experiences/pressure groups.

The problem areas should be classified according to their "position" as regards the educational sector, i.e. whether they can be regarded as internal or external factors.

Among the internal factors one could imagine:

- problems related to organization work, distribution of responsibilities and functions - within one level or between different levels;
- problems related to procedures (the process and methods) of planning, budgeting and administration with special emphasis upon the system of communication, co-ordination and information;

- problems related to personnel policy: recruitment, assignments, promotions, salary scales (as compared to other public institutions and to the private sectors);
- problems of a psychological nature resulting, for instance, from cultural or racial differences.

Of external factors could be mentioned:

- problems related to interest groups (teacher unions, parents' organizations, political parties, etc.);
- problems due to lack of communication and co-ordination with other public institutions (ministries, etc.).

A special category of problems are those which are due to lack of coherence and realism in educational objectives, contradictions between explicit and implicit objectives, and - of course - difficulties encountered in relation to limited financial resources.

It should be evident that it is important to undertake such a pre-study before the actual planning of the study is started. Firstly, training needs can only be identified through a global analysis where not only the actual tasks of the personnel are known, but also the framework of their future work. Problems which may in the beginning seem to be caused by the lack of competent personnel may turn out to be occasioned by quite different factors. Secondly, in order to choose the most appropriate approaches, a thorough understanding of the functioning of the system is required. For instance, questionnaires may be used for some personnel categories, whereas information from other groups may only be obtained through direct and informal interviews.

6. Seminar on the results of the pre-study: Once the results of the pre-study have been analysed, a seminar (workshop) should be organized in order to have a thorough discussion of the findings with various people who are in one way or another related to the study. All participants at such a seminar should receive documentation beforehand concerning both the objectives of the study and the most important results from the pre-study. It is of particular importance that the personnel who will later be analysed in terms of training needs are represented at the seminar, with a view both to having their opinions on various matters and to informing them of the reasons for the study and what will happen later on. It is possible that in some cases, particularly when the study should cover many personnel categories and at different hierarchical levels, one should try to arrange more than one seminar.

7. The design of the questionnaire: On the basis of the results of the pre-study and the seminar(s), one should normally be in a good position to start drawing up the questionnaire. In most cases, there would be a need for at least two different questionnaires; one to be filled in by all the personnel under study on an individual basis, and one which should be presented only to work leaders (i.e. chiefs of units, departmental directors, etc.) and which should be concerned with the

work of their section and its personnel in terms of problems, constraints, needs for training, etc.

The first questionnaire should in principle include questions relating to the following aspects of the personnel:

- formal educational background;
- specialized training courses.
  a) in educational planning and administration,
  b) in other fields;
- professional background;
- detailed description of present function/tasks;
- personal opinions as regards: problems encountered in the job, interests as to present function, promotion possibilities, salary, major objectives of the educational system, priority areas in training based on present problems, types and length of training preferred (part-time vs. full-time courses, etc.).

At least for some of the above questions the information could probably in many cases be taken directly from the personnel files in the ministry, provided these are accessible.

The second questionnaire (for the work leaders) should request information on the following areas:

- major functions of the unit and their respective importance in terms of time required;
- important constraints as regards the implementation of these functions. Such constraints may be of the following nature:
  - lack of financial resources.
  - lack of physical resources.
  - lack of personnel (in number).
  - lack of adequately trained personnel.
  - lack of co-ordination between units on the same organizational level (horizontal co-ordination).
  - lack of co-ordination between units on the different organizational levels (vertical co-ordination).
  - problems as regards transportation and communication;
- opinions as regards which measures could be taken to remedy the most problematic situations;
- opinions as regards priority areas for training of the personnel in the unit with respect to type, location and length of the desired training activities.

8. In many cases it may be difficult or impossible to utilize questionnaires as regards certain personnel categories. In order to obtain the necessary information it may therefore be advisable to develop an interview guide which should contain more or less the same questions as mentioned above, but for use in direct interviews. Naturally, information given under such circumstances may be difficult to present empirically (for instance, in tabulated form), but it will at least give a basis for a better understanding of problems than if certain categories of personnel were left completely outside the study.

9. Pre-test of questionnaire and interview guide: As a general rule, all questionnaires and interview guides should be tested before being applied. Normally such a pre-test needs only to be undertaken on a limited number of persons, but in any case potential future interviewers should be involved in order to receive training at an early stage.

On the basis of the results of the pre-test, the questionnaires and the interview guide should be revised, questions may eventually be totally dropped or changed, and new ones may be included.

When the final version is ready, instructions for filling in the questionnaire should be worked out. How detailed this should be will depend upon whether one plans to use "self-administered" questionnaires or to have interviewers in each case. Normally the latter alternative will yield a higher response rate, but of course it is more costly.

10. Drawing the sample: Depending upon the number of persons that are to be interviewed, a decision will have to be taken as to whether all the personnel in question should be included or whether a sample should be drawn. In the latter case, strict scientific sampling procedures should be utilized as far as possible in order to avoid serious bias in the sample.

11. Briefing of interviewers: The question as to whether to use interviewers and eventually who they should be is of considerable importance. Problems may arise if, for instance, it is decided to use personnel working in a ministry of education as interviewers since in this case they may either be perceived as "agents" or inspectors by their colleagues, or influence in various other ways the answers given. It may therefore be considered to hire outside people (for instance, from a research institution) to do the work. In any case, this question should be discussed during the seminar following the pre-study.

No matter who the interviewers are, it is essential that they receive a good briefing on how to go about the interview situation. The accurate meaning of each question should be thoroughly explained so that they may help respondents whenever needed.

A particular problem which usually arises in studies of this type is the question of confidentiality. Normally, it will turn out to be impossible to use "anonymous" questionnaires since one will need rather accurate descriptions of the functions of the respondents. It may therefore occasionally be advisable to operate with two sections in the

questionnaire, the first presenting questions concerning educational and professional background, etc., and the second section presenting opinion questions. Respondents could then be free to answer the second part or not.

12. The interview period should be scheduled taking into consideration the work load of the personnel and holidays. Particularly, if one operates with a nation-wide sample (with personnel working at regional and local level), a letter of information should be sent beforehand announcing the study to all leading officials affected.

A special response check-list should be worked out in order to get the reasons for possible non-response.

For various reasons some officials may have made it clear that they do not want to fill in the questionnaires. However, they may be willing to undergo direct interviews (which may give even more detailed information than that obtained through the questionnaires).

13. Processing of data: Once the questionnaires have been collected the processing of the data should begin. If the sample is large and a computer available, it may be time-saving to computerize the data, which in that case would involve both coding and the development of a programme for the analysis. However, there are usually a number of data which can not be computerized and which consequently will have to be studied on the basis of reading through each questionnaire. This may be the case in particular for the descriptions of functions and the problems encountered in the performance of tasks.

14. Analysis of the results from the questionnaires and the interviews: The analyses of the data collected could be structured around the following factors:

A. Educational background

   a) Characteristics of and differences between personnel categories as regards length and type of education.

   b) Relationship between the educational qualifications required in job descriptions and actual qualifications held by the personnel. Reasons for possible discrepancies.

   c) Relationship between formal educational background and salaries and frequency of promotions.

   d) Frequency of specialized training courses with relevance to present functions and their linkage with promotions and/or salary increases.

B. Professional background

   a) Characteristics of and differences between personnel categories as regards length and type of professional background.

   b) Relationship between the professional qualifications required in job descriptions and actual qualifications held by the personnel. Reasons for possible discrepancies.

c) Relationship between professional background and salaries and frequency of promotions.

d) As a particular point one should see how many have been teachers before entering the administration and whether this category of personnel turns out to be different from those who have never been teachers in terms of level of positions and frequency of promotions.

In general the relationship between educational and professional background should be analysed carefully as it will show the relative importance devoted to each of the factors by the persons responsible for the recruitment and promotion of the personnel.

e) The mobility of the personnel as between different public and private institutions.

C. The analysis should be undertaken on three levels:

a) The level of the individual: When comparing official job descriptions and the descriptions given by the personnel themselves as regards the work they are doing, one may encounter considerable discrepancies. This may eventually lead to a redefinition of the job description and/or to a redefinition of the educational and professional qualifications needed for a particular position.

In any case, the work descriptions given by the personnel will be useful when training and possible reorganization of work are discussed.

b) The level of the work unit: When summarizing and cross-checking the work descriptions given by the personnel of a unit and those given by its work leader, one should have obtained a relatively good picture of the division of labour and the tasks undertaken in the various units under study. (At this stage the information obtained through the questionnaires may sometimes need to be completed by direct interviews).

c) The level of the sector: The procedure for analysis at this level will depend upon whether a decision has already been taken to change the present system and methods of planning (e.g. to decentralize a number of tasks/functions), or whether such an alternative should only be regarded as a possible outcome of the study itself.

In the first case the analysis should be oriented towards a comparison of the present work arrangements with those required in order to implement the introduction of a new planning system. Of course changes will have to be implemented gradually on the basis of a realistic view of the capacity of the present system to adapt to a new

situation.[1] Bearing in mind the political and human implications of such decisions, it should be clear:

i. that the problem of job security is an extremely important element to take into consideration whenever one discusses reorganization of work in general and decentralization in particular, and

ii. that any study of training needs which implies important reorganization should be oriented firstly towards the needs for retraining people who will have to leave their present positions; secondly towards those maintaining their present positions but receiving additional tasks as a result of the reorganization; thirdly towards those who will enter the institution from outside (both at the central and regional/local levels); and lastly towards those who maintain both their present position and their new tasks.

In the case where, a priori, no decisions have been taken to introduce major reorganization of work arrangements, the analysis may, of course, (and perhaps more realistically) be based more on how to improve the efficiency of a bureaucratic system that in principle will continue without major changes as regards organization. However, the study may lead to results which call for more or less fundamental changes.

D. Opinions of the personnel: As indicated under step seven, the opinions of the personnel (including those of the work leaders) should be sought on a number of questions. During the above-mentioned analyses of functions, problem areas identified by the personnel should already have been considered and taken as a point of departure for the establishment of proposals for changes in work arrangements.

The study of opinions should go even further. Improved efficiency means, in general, changes as regards motivation of and working conditions for the personnel. Many organizational reforms have collapsed completely or have been seriously

---

1. An example may illustrate this. It may for instance have been decided at a political level that as a first step towards decentralization, decisions and administrative work concerning allocation of teachers to primary schools should be transferred from central to regional level. In the present system this work was the responsibility of a particular section within the ministry. If such a transfer of functions takes place, the personnel of this section would either have to be allocated to other parts of the ministry (or be asked to work at regional level), or they would have to leave the education sector.

jeopardized by the lack of support from the personnel concerned, usually because the objectives have been established without a realistic understanding of what may be called the bureaucratic and human constraints acting against change. Such constraints should be studied in at least two (interrelated) ways:

i. Opinions concerning personnel policy: The personnel policy of an institution plays a fundamental role as regards its ability to adapt to new situations. As already mentioned, job security constitutes an important element in this respect. Other elements are promotion possibilities and salary conditions. As in any bureaucratic organization, an educational system is characterised by a complex set of rules and norms which affect the employment situation of the personnel. The attitudes of the personnel towards these standards will vary according to the position held in the hierarchy, as well as to other factors such as career pattern, frequency of promotions and salary increases, interest in work, etc.

ii. Opinions concerning training: The opinions of the personnel about training will have to be studied carefully before any training scheme can be designed. However, one will in most cases have to face an important contradiction in the way in which, in practice, training needs may be viewed from at least two different angles: first from the point of view of the leadership of the institution in question. In this case it would imply that the needs for training of the personnel are viewed in terms of improving the efficiency of the work undertaken at the institution as measured with regard to the achievement of a given set of objectives.

Secondly, it can be considered from the point of view of an individual who is working within the institution. Training needs may in this case be acknowledged only to the extent that increased competency may lead to improved chances for promotion or salary increases.

To simplify somewhat, one may say that the two approaches may yield quite different results.

The 'institutional' approach will normally be centered upon improving the efficiency of a person as regards his present position, whereas the 'individualistic' approach will be more oriented towards acquiring qualifications that are required for a different, but higher and/or better paid position.

Naturally, the difference between the outcomes of the two approaches may vary considerably according to the circumstances. The training received for a specific

job may for instance be quite relevant to the work a person would have to do if promoted to a superior position within the same working unit.

However, the fact remains that there will always be a more or less open contradiction between the aspirations of the personnel and the training needs conceived and acknowledged by the leadership of an institution. Probably the success of a given training policy will depend to a large degree on the extent to which these two (conflicting) views may be reconciled.

15. Recommendations concerning work arrangements: During the pre-study and the second analysis phase one should have gathered sufficient information in order to establish a set of recommendations as regards necessary changes in work arrangements, both at the level of the working unit and, possibly, for the sector as a whole. Evidently, these recommendations will have to be discussed in detail both with the personnel and the leadership of the institution. A realistic time schedule will have to be worked out for the implementation, as well as a cost analysis. If the recommendations are of a substantial nature, one may need to develop several alternatives. Implications for the personnel should be specified both in terms of modifications of job descriptions for the personnel already working in the units affected, and in terms of the eventual creation of new positions.

Recommendations concerning personnel policy: Normally one will have encountered a number of problems linked to the personnel policy of the institution. Recommended changes in this respect may for instance concern revalorizations of certain positions in terms of salary, altered rules for promotion, increased job security through the creation of more permanent contracts, etc.

Recommendations concerning training of personnel: The training scheme should be developed in accordance with the results of the analysis of work arrangements and with due respect to the priorities presented by the personnel.

In simple terms, much of the basis for the work consists of a comparison between, on the one hand, the actual competencies held by the personnel in the present system, and, on the other, those competencies and other characteristics which the study has identified as requirements for an efficient functioning of the system in the future.

In addition, one will have to undertake an evaluation of the existing supply of training activities in the field of educational planning and administration, particularly in terms of finding out what are the limits of this training with reference to actual and future needs.

The training scheme would have to be explicit on the following points:

- which personnel categories are in need of being trained, and which should be given highest priority?[2]
- what types of programmes should be used (e.g. in-service, out-of-service, full-time, part-time, etc.)?
- who should be in a position to arrange this training, in terms of developing the content of the programmes and doing the actual teaching?
- when and where should the various programmes take place (at the central ministry, at the regional level or local level, in a university, outside the country, etc.)?
- what should be the length of the programmes?
- what will be approximate cost of the programmes, and who will bear it?

Naturally, one will probably identify needs which are difficult to satisfy for the existing institutions that are offering training in the field. One may therefore think of recommending the creation of a new training institution, possibly set up in co-operation with other ministries facing similar needs. However, such a step should only be taken after having carefully considered whether, for instance, more financial resources could not help the existing institutions to improve their supply.

The above procedural suggestions have been developed mainly in order to assist those professionals working in the field of education who are interested in the complicated process of identifying training needs in educational organizations. It should have become clear that,

---

2. Remembering that such a scheme will have to be designed with reference to the plans which exist for the future development of the educational system, one could here imagine three 'sub-schemes':
   - one reflecting immediate needs, based on present problems;
   - one reflecting needs as forseen over the next two to three years;and
   - one long-term programme.

   The latter could be oriented towards certain 'ideal profiles' for the personnel working in the educational system in the future. Although difficult to specify and operationalize, such profiles may be useful to have at hand, particularly for those persons developing the programmes for longer studies in the field of educational planning and administration (mainly at universities). Hence, this long-term programme may perhaps be less relevant for the personnel presently working in the system than for those joining at a later stage.

in a certain way, the impact of training is here seen as a 'residual' category as regards what should be done to improve the efficiency of educational planning and administration. Unclear objectives, lack of adequate organization of work and rigid personnel policies are normally more important constraints than the limitations presented by the competencies of the personnel of a given institution. Consequently, in order to identify and define the role and importance of the latter, one will have to make a global study of the system.

Identifying training needs: A case from Papua New Guinea

A good example of a systematic effort to determine training needs using a combination of techniques has been provided by the "Education planner and administrator training needs project in Papua New Guinea."

In 1977 the department of education of Papua New Guinea undertook an investigation into the training needs of educational planners and administrators in collaboration with the IIEP, Paris. This project was co-ordinated by a Research Committee with a wider representation. The training needs covered Senior staff at headquarters, Provincial superintendents, Inspectors, Advisors and adult education officers, Managers, Principals and head masters, Senior school teachers, Church education officials and other groups of people exercising influence on the planning process (e.g. members of boards, politicians etc.).

The members of the Research Committee visited a number of provinces in Papua New Guinea and used the following mechanisms.

a) Asking people to fill questionnaires (described below).

b) Discussing educational issues and problems and recording the same.

c) Asking people reality testing questions on educational planning.

d) Finding out any specific problems or details of any unique activities.

e) Interviewing key people.

Questionnaires

Several questionnaires were administered to samples of respondents. One of them elicited information on personal background and particulars. Another questionnaire attempted to explore the respondent's knowledge of the system, his opinions about his work and issues affecting it etc. A sample of questions from one of these questionnaires are reproduced below.

Education system problems

1. Budget savings - Imagine that you were asked to implement an important objective in the education system by having to take the money from some other area of the education budget. List some ideas on where you could save big or small amounts in the current education budget - by reducing, deleting, modify-

ing of current activities. Give details and number each item.

2. Youth employment - write down your views on how you think the education system can make a positive contribution to the youth employment problem.

3. Self-reliance - write down any suggestions you may have as to how education system could make a bigger contribution to self-reliance.

Staff assessment

Indicate the priority order you would give to the following factors/criteria for assessing the work performed by staff under your control. Each group should be numbered separately.

Group A	Priority One to ten	Group B	Priority One to ten
Flexibility	-	Punctuality	-
Personal characteristics	-	Work competence	-
Care in work	-	Cooperativeness	-
Pleasantness	-	Verbal expression	-
Enthusiasm	-	Writing ability	-
Energy	-	Technical skills	-
Initiative	-	Knowledge of job	-
Creativity	-	Interest in work	-
Sense of humour	-	Effort on job	-
Sensitivity	-	Thoroughness	-
		Team work	-
		Ability to think clearly	-

Decision making

In the following questions the word "situation" is used to cover the time, the place and the nature of an event or occassion where educational decisions are being made. For example, some decisions may be made at a hotel where after work hours a senior officer visiting a province is talking to a provincial officer. Some officers make most of their decisions in their own office. The letters A, B, C, D, E in each column in the table below are to show where the answers to the following questions should be recorded.

A. What are the three most important situations that you find yourself in when you are involved in education decision-making?

B. How do you make decisions about what topic or topics are the most important on which you have to make decisions?

C. What facts, consideration, view points, criteria do you consider in making the decisions.

D. Are other solutions considered before a decision is made?

E. Give a brief example of a possible solution that was rejected.

Important Decision Situations	Recent Decisions about the topic	What information rules etc. do you use?	Are alternatives considered	Alternative solution
A	B	C	D	E

Organizational efficiency

Indicate with a tick mark your opinion as to the efficiency of the following organizations. Briefly comment on your answer. By efficiency we mean how well they do the job they are supposed to do under present conditions

Organization or Branch	Efficiency rating					Brief comments
	No idea	well done	Satisfactory	Not good	Very bad	
Board of Management						
Provincial Education Boards						
National Education Boards						
Teaching Service Commission						
Provincial Education Office						
School Broadcasting (Radio)						
Examination branch						
Inspectors						
Curriculum advisors						
etc. etc.						

Reality testing questions

The reality testing aimed at finding extent of knowledge possessed by the planners. While using reality testing questions for provincial planners, first general discussion sessions were organized in groups with interview panel. This was followed by individual discussion. One of the members of the team was in a nearby location. The interviewer recorded the sessions and gave an estimate of the quantity of correct information possessed by the respondent in each section. The questions dealt with five sections. The sections and samples of items used are given below:

1. Population data: Size of population in provinces; distribution among districts, balance of males and females, estimates of school age children, birth and death rates, percentage of literacy etc.

2. School data: including information on items like enrolments in teacher education, in primary schools by grades, secondary education and vocational schools, statistics about teachers, importance of birth-rate for school enrolment estimates, dropout rates, etc.

3. Time-scale planning: information on items like estimated additional community schools for next year, plans for expansion of teacher enrolments, consultations with the community, steps taken by the communities to build classrooms, future agricultural, vocational, technical skills needs etc.

4. Socio-economic and political consideration: Information on items like unemployment, land and sea size, social and political pressure groups in operation, diseases in the province etc.

5. Other issues: including information on various government agencies, functions, awareness of ones own responsibilities etc.

Executive assessment workshops

In addition to the data collected from above methods, data available from the executive assessment workshop which was being conducted in the country in addition to regular performance evaluation were also used. These records included results of psychological tests, and indicators of creativity, verbal expression, writing ability, initiative, leadership, and group achievement skills. These forms of data indicated significant insights into the training needs. For example, the reality testing data on population section indicated that there are serious gaps in the basic demographic knowledge of provincial superintendents and church education officials. A large proportion of officials also had very poor idea of the time dimensions of planning.

All the three types of data (questionnaires, reality testing questions and executive assessment workshop data) and an analysis of official documents and records indicated the following:

a) Major divergences were found between duty statements of the department and actual duties performed. Certain important duties did not appear in the statements and certain other important ones are not being performed by the staff.

b) The importance of staff attitudes in effective running of the system became very evident.

c) A large amount of information gaps among different categories of administrators were found.

This study has thus thrown up inputs for training strategy, training inputs for curriculum design, as well as for other organization development activities in education.

Identification of Training needs in Educational Planning and Management for Nepal

A recent study[3] of identifying training needs in educational planning and management for Nepal by Shrestha, Malla and Gupta (1980) provides another illustration of the techniques that could be used to identify training needs and develop curricula. The study was undertaken to

1. find out detailed jobs of the educational administrators at various levels;
2. identify curricular areas to organize training for educational administrators and supervisors of all levels;
3. identify areas of training that would be relevant and useful;
4. find out the items from among ROEAP, Unesco materials that are most useful for educational administrators;
5. find out the most suitable duration of training, and
6. find out the appropriate methods and delivery systems for training educational administrators.

All the jobs occupied by second-class officers (under secretaries, deputy directors, curriculum specialists, etc.) and third class officers (section officers, curriculum specialists, examination officers, assistant district education officers, etc.) were covered in the study.

Questionnaire methodology was used to study the training needs, etc. of these officers. About 50 per cent of total first class officers, about 33 per cent of total second class officers, 33 per cent of district education officers, 33 per cent of supervisors, and about 10 per cent of secondary school headmasters were included for this study. They were selected by stratified random sampling from three different types of districts of Nepal that represented varying nature of problems.

The questionnaire consisted of four main parts:

1. a section dealing with topics of education planning and management listing 36 topics;
2. a section listing 62 office-related jobs,
3. a section listing 72 school related jobs, and
4. a section that sought to find out appropriate duration and methodology of training. The respondents were required to indicate priority ratings on different topics as they experienced the need.

---

3. Shrestha, Kedar N. *Identification and Development of Training Needs in Education Planning and Management for Nepal.* Kathmandu: Institute of Education, Tribhuvan University, Nepal, 1980.

The questionnaire effort was supplemented by a workshop of supervisors and headmasters to discuss about the education system in Nepal and to identify training needs of educational personnel in Nepal.

A research advisory committee consisting of heads of two research centres of the university, a joint-secretary of the ministry of education and the research team directed the research project. The advisory committee played an active role in the project at every stage.

The detailed outcomes of the project study are presented in the original report. Some of the salient features of this study include the following:

1. The study lists the topics on which there is a high degree of consensus as training needs for different categories of officers.
2. The survey brought to surface a number of ambiguities that existed in relation to different roles. Quite a few important jobs have been perceived as belonging to two or more different categories of officers.
3. The survey indicated the need to reinterpret some roles and the need to give more power and authority to some others. For example, supervisors are seen as having required to play the role of technical assistants to headmasters and DEOs; and headmasters should get full autonomy to administer schools.
4. Programmes of different duration was suggested for different levels of officers.

This study provides a good base for planning future programs of education management in Nepal.

Chapter Six

DEVELOPING A CURRICULUM

The next step after identifying training needs is translation of the training needs into instructional objectives and identifying training content and learning experiences required. This is the step of developing a curriculum.

Steps in developing a curriculum

The following steps may be followed in developing a curriculum.

1. Select the role or the set of roles for whom the training is being proposed.
2. Identify for each role the various functions that need to be performed by occupants of that role.
3. For each function identify the knowledge, skills and orientations required. For educational administrators these may be further grouped under three sub-categories: technical, managerial and behavioural. Technical knowledge for an educational planner may correspond to knowledge of techniques of planning, knowledge of educational statistics including the nature and sources of educational data available, educational demand forecasting etc. His managerial skills may deal with managing the availability of information which may involve skills of co-ordination, and so on.
4. Remove those items (knowledge, skills, etc.) which the role occupants already have. Both steps four and five constitute the survey of training needs.
5. After generating an exhaustive list, these may be grouped into some meaningful categories. These categories may be suggestive of the categories of inputs required for training.
6. Prioritize these areas on the basis of their importance and availability of time. Weightages may be assigned on a 5-point or 3-point scale.
7. Develop training modules for each category.
8. Prepare a scheme of sequencing the modules to maximize their effects.

Example:

The following example illustrates the various steps involved in training Adult Education Managers (called as supervisors in India). Adult Education Managers are involved in planning, initiating, and managing adult education activities in a given region. Each Adult Education Manager (AEM) is in-charge of 30 adult education centres. He is a full-time employee paid by the government for managing the adult education activities annually in 30 centres. His job includes identifying villages needing adult education, identifying instructors, developing a curriculum, training the instructors, supplying necessary infrastructural facilities, monitoring the performance of Adult Education Centres (AECs) through periodical visits and supply of materials, evaluating the performance of AECs etc. Let us imagine that a group of fresh candidates are being appointed as AEMs and they need to be trained to perform their job well. The following steps may be followed.

1. Role or category of roles for whom the curriculum is developed: Adult education managers (new recruits or those without any prior experience).

2. Functions of AEMs (Terminal Behaviour):

   a) Select villages that need and are willing to have adult education programme.

   b) Select instructors from the villages through village participation.

   c) Identify local needs of people for developing the adult education curriculum.

   d) Develop instructional material or adopt those that are already available to suit local needs.

   e) Train instructors in the content, methods of teaching and programme management.

   f) Visit the Adult education centres and help the instructors on their problems (e.g. supply of materials) and monitor their work.

   g) Provide support to the instructors by mobilizing local officials and development agents to participate in the AEC activities.

   h) Evaluate performance of the AECs, including changes in adult learners.

   i) Maintain informationa bout the centres and the learners, their attendance etc. and supply information to the higher authorities whenever required.

   j) Distribute salaries/honoraria to the AEC instructors and maintain accounts.

3. Knowledge, skills and orientations required to perform each role:

   a) General: For all the functions the following knowledge, skills and orientations are required.

      i. Knowledge about adult education; its role in development; various modalities of adult education; literacy rates in the country and the region; Adult education programme, its objectives, policy and strategies; villages and people.

      ii. Skills of organizing groups.

      iii. A positive attitude to rural people, a desire to learn continuously, perseverance, initiative and a positive attitude to adult education.

   b) Selection of villages: Knowledge about the villages, village occupations, scope for innovation in these occupations, literacy rates, scope for initiating economic activities, knowledge and skills required by various occupations, ways of life, and villagers' orientations to literacy, skills of data collection through observation and informal discussions.

   c) Selection of instructors: Knowledge about the minimum requirements to be an instructor, skills to gather information or generate a list of candidates from villages through the participation, testing and interviewing skills for selecting instructors.

   d) Identifying local needs: Skills in survey techniques, some basic knowledge regarding the occupations in which people of that area are involved e.g. agriculture, animal husbandry, etc.

   e) Preparing instructional material: Knowledge about learning abilities of illiterate adults, mechanisms of imparting literacy, principles of learning, organizing learning activities, sequencing of learning activities, knowledge of learning materials available for AECs, agencies that supply these materials, various agents that may assist in developing curricular material (e.g. experts from an agricultural university may work on agriculture related topics) etc.

   f) Training the instructors: Knowledge about various development programmes, agencies and agents associated with these programmes, local agents, skills in organizing training, knowledge about some basic training methods with special references to less qualified groups, skills for designing and conducting a training programme including communication skills, techniques of educating adults.

g) Monitoring: Willingness to travel in villages, a concern for excellence and supportive orientation, taking initiative and mobilizing development agencies to participate in the activities of AECs, supervisory skills including knowledge about areas that need his attention.

h) Evaluating performance: Knowledge of evaluation techniques and skills in developing simple tests and testing mechanisms for adults.

i) Information system: Knowledge about the various forms to be filled, mechanisms of collecting and maintaining data.

j) Managing finance: Knowledge about financial resources available, flexibilities available to him, norms for disbursing salaries, knowledge about financial rules and regulations for AECs, and skills to maintain financial records, knowledge about the accounting system.

4. The items the candidates already have (Entry Behaviour):

Most of the supervisors are fresh graduates and have not worked in the area of adult education.

5. Categorization of inputs:

The inputs required for training the AEMs can be categorized under the following modules:

a) Adult education: Concept, compenents, need, status in the country, policy and strategy.

b) Understanding and organizing rural masses.

c) Curriculum development for literacy, functionality and social awareness in rural areas.

d) Techniques of educating adults.

e) Recruitment and development of instructors.

f) Guidance, supervision and monitoring AECs.

g) Information systems.

h) Financial management.

i) Evaluating performance of AECs.

j) Co-ordination with other agencies.

k) Role of AEMs.

6. Prioratizing:

This does not apply as all the above mentioned inputs should be included and as this is training for freshers.

7. Methods of training:

Only broad methods or strategies are suggested below for three of the above modules. In actual situations it may be useful to specify session-wise details after estimating the

number of sessions or hours of instruction. The letters correspond to the modules or categories of inputs mentioned above.

a) Class room training: Background material will be given to the candidates on adult literacy. Class discussions on literacy and development. Case studies of a few countries with high literacy. Case studies of families and communities with high level of education. Film shows. (This module would have three days of class room instruction and discussions. The discussions would aim at developing positive orientations about adult education and motivate them to participate effectively by developing a positive self-concept).

b) Case studies on the techniques and strategies used by a few voluntary agencies in rural development work. Class lectures. Visits to villages and notes on mobilizing rural masses. Field work and interviewing in a village (one week).

c) Copies of adult literacy primers already developed by State Resource Centres, Adult Literacy House, etc. Lectures on curriculum development. Group work on preparing a lesson, and testing it out on a group of adults in a village setting (one week).

The above stated inputs can be expanded to work out a detailed schedule or programme for every day. Mechanisms of working out such schedules are described elsewhere.

Modular approach to curriculum development

Different levels and categories of education managers need different syllabii, according to their training needs. However, some inputs may be common amongst some groups. For example, the skill of "developing employee motivation" may be required in several categories and levels of administrators. It may, therefore, be useful to develop self-contained units of curricula. These are called modules, and these are like mini-curricula. A curriculum for a particular role may be developed by selecting some appropriate modules, and arranging them in a particular sequence. This is the modular approach to curriculum development. The main advantage in the modular approach is that self-contained well planned units are prepared with great care, and the task of curriculum development is made much simpler. This is like construction of a house by selecting available modules of bed rooms, kitchen, portico, etc. and assembling a house from pre-fabricated modules.

In the modular approach of curriculum development all the capabilities required to perform closely interrelated sets of tasks are grouped together e.g. capabilities required to manage institutional finances including generation of finances, allocation, accounting and monitoring. All these can be grouped and called as Financial Management. Modules are developed separately for each of such interrelated tasks.

A list of such modules is presented in the last section of this chapter. Material for some of the modules is available with Unesco and the IIEP. A matrix of suggested levels of learning for different levels of planners and managers is also presented.

Characteristics of a module: "A module is a set of learning opportunities organized around a well-defined topic which contains the elements of instruction, specific objectives, teaching/learning activities, and evaluation using criterion-referenced measures." (definition adopted at the ACEID workshop on the application of Educational Technology to the preparation of instructional materials). Thus a module should have the following characteristics:

- it should be a self-contained, independent instruction unit;
- it should contain a set of well-defined, systematically organized learning opportunities;
- it should clearly define the objectives to be achieved; and
- it should have a means of evaluating the work.

The following may be kept in mind while preparing modules.

1. It should provide opportunity for the learners to assess their own progress and understanding at regular intervals.
2. It should give them opportunity to apply his learning after each unit or a set of units of learning.
3. It should be self-motivating.
4. It should suggest basic material for a learner who finds it difficult to follow and reference or further reading materials for a learner who is interested in attaining higher levels of mastery.
5. It should suggest or contain wherever possible supplementary materials including recorded lectures, cases, films etc.
6. It should be self-contained. The module should be structured in such a way that the learner will be able to learn or achieve the objectives independently or with minimal assistance from the trainer, and without the necessity of using extraneous materials. The presentation of the lessions, the directions, the guidelines, the tests and the assignments, if any, should be arranged in a clear and careful order. The pre-test, tne formative tests, the post-test, and the answer keys should be made available to the learner for use at his convenience.
7. The subject matter should be concise and well-defined. The content of a module should be as brief and to the point as possible, strictly focused on attaining the objectives of the module. It should not be vague or over-long, as this will only confuse the learner and prevent him from realizing the objectives.

8. It should motivate the learner. Objectives which are clearly defined and activities which are well designed to achieve them are motivation enough for most particupants. However, special efforts should be made by module writers to ensure that the modules have some sort of psychological or pedagogical motivation expressed or implied. The model should be like a real-life learning situation where the trainer gives the class an appropriate motivation for every activity.

9. It should provide opportunities for interaction with the learner. The module should be written in such a manner as to build a rapport with the learner who continuously reacts to it. To create such an atmosphere the modules should be made to "talk to the learner" in a personalized manner. Most sentences, especially the guidelines, the directions and the clarifications, should be addressed to the learner. Enrichment activities in the form of worksheets or study sheet assignments are a fruitful source for interaction. The learning activities should be challenging to the student's intellect, imagination, and creative ability.

10. Its objectives and activities should be properly sequenced. Sequencing means following a pattern of activities or experiences so as to provide the learner with cumulative understanding and skills. Properly sequenced learning patterns are necessary because they inculcate the knowledge and skills, which are prerequisities for a specific learning task. As in the practice of a good teacher, the sequential order of the module should be exemplary to ensure an effective learning process.

11. It should be written in a clear, correct language suitable to the level of the target learner. This feature is self-explanatory. However, a reminder is often necessary for some module developers who find it hard to simplify their language to the level of the learner. A module - most often used without the assistance of a trainer - will surely be ineffective if it is hard to understand.

12. It should be so written as to make it interesting and appealing to the learner. All means available to make the learning situation interesting and appealing to the target learner should be used. The users of a module should be able to find the learning situations interesting to a certain degree and, certainly, never boring.

13. It should be accurate. The content should be accurate and there should be no chance allowed for misinformation. This feature calls for the co-operation of subject matter content specialists. When it is necessary for a trainer to write modules on a subject outside of his sphere of specialization, the help of a subject specialist should be solicited. The accuracy of facts and figures is essential in a module which may be a good source of cognitive knowledge.

14. It should be oriented to the real world. The learning activities suggested for a module should involve the learners in real life situations and if that is not possible, they should use simulation techniques. The module should also provide suggestions to learners for designing their own projects and for undertaking exploratory activities with a view to blending theory and practice.

15. It should take every opportunity to educate in the most general sense. A good module aims not only for cognitive and psychomotor results, but also for affective learning, to make for a fuller, richer and more refined quality of life, to develop the individual's attitudes, appreciations and values.

16. The objectives and the content should be relevant and reflect areas of national concern. The module should have relevance to the tasks of education planning or education management. It should take into consideration the changing national priorities and concerns. For example as in most countries community participation in planning educational activities is being emphasized. The modular material should take this into consideration and build it, whereever needed, into the content. Similarly if vocationalization is aimed at, the same should be focussed upon while presenting planning or management techniques.

17. The learning activities should be linked with immediate tasks. In training educational managers or planners since they are actually involved in the tasks, the modules should, as far as possible, deal with the activities in which they are immediately involved. As they are generally busy people they may not have patience to learn only high sounding theories which they are not likely to use. The practical aspects should be reflected in the module.

18. The module should give new perspectives and a new look at the task of educational planning or management.

19. The module should encourage innovativeness and experimentation. Management is as much as art as it is a science. Practicing managers who are innovative constantly add to the knowledge in the field of management. By encouraging experimentation the educational administrator's capabilities to deal with unique situations (which he generally faces) are increased.

Advantages of modular approach[1]

The advantages of the modular approach stem from its underlying philosophy. The philosophy behind learning modules is based on the generally accepted fact that each student is a unique individual with a background, experiences, inborn qualities, habits and learning styles different from those of other individuals, and as such he should be allowed to grow and develop to the limits of his potential, and by himself attain self-fulfilment. As instructional materials, modules possess the qualities that will make the individual an independent learner who progresses at his own speed.

In developing countries, education is accepted as an instrument for development. Self-reliance, initiative and team work are some of the important traits that need to be developed among the people living in rural areas, including children, teachers and teacher educators. Learning through the use of modular materials helps to develop these qualities more effectively.

Draw-backs may occur only if modules are not well prepared. If the learning activities planned are not sufficiently challenging, the pedagogical aim may not be realized. Great care, therefore, needs to be taken in planning learning activities.

The development and the use of modular materials may require significant investment in the initial stage. But this investment will yield tremendous returns.

Guidelines for designing, writing and testing modules

A. Designing a module

There are three major stages in preparing the design of a module. These stages are planning, preparing the draft of the module, and revising the draft after trying it out. Each stage is explained in detail here. However, it should be noted that a module developer may choose to modify the procedures to suit the local conditions.

1. The planning stage. The first task at this stage is to assess the needs of the target population. The module developer should identify the target group for whom the module is intended to be used. Suppose the target group consists of educational planners. Having identified this group, the module developer should then decide whether the module is intended for national level planners or those at the regional level. He should also decide whether the module will be used for the pre-service or the in-service education of planners, or whether for classroom teaching or for distance teaching.

---

1. This section on modules has been taken, with some modifications from *Developing Instructional Modules for Teacher Education: A Handbook* (Unesco, ROEAP, 1978)

Once the target group is decided, it is necessary to assess the needs of the group. This assessment can be made as suggested in chapter five. As a result of this exercise, a number of problems will be identified. The module developer should then prepare an inventory of the topics and problems. The next step is to survey existing modular materials. If it is found that modular materials on some of the topics are available, the module developer should evaluate them and decide their usefullness. This will give him an idea of the topics or problems for which modular materials need to be developed. The module developer then uses his judgement to select a topic.

The next step is to collect as much relevant information as possible. It is recommended that information on locally available resources be assembled and assessed. There may be materials and resources which could help to satisfy the needs of the target group; if so, their usefulness should be studied. They may be useful in providing learning activities or learning resources in the modular material.

Once adequate information on resources has been collected and analyzed, the module developer should consider the following questions:

a) Is the selected topic worthwhile?

b) How will the target group benefit from this programme?

This exercise will help to justify the selection of the topic.

Having pinpointed the target group and the topic, the module developer may next proceed to formulate a specific plan of module development. Things to be decided at this step are: Who is going to develop the module? How will it be developed? When should it be completed? How much will it cost? What kinds of resources will be mobilized? In formulating a plan, it is desirable to keep it flexible and practicable.

2. The drafting stage. Once the planning has been done, the module developer is ready to draft the modules. The first thing is to formulate the objectives of the module. The objectives are based on the need assessment done at the planning stage. In formulating objectives, it is necessary to utlize fully the information gathered at the previous stage including anything learnt about potential problems. It is desirable to have the objectives stated specifically in terms of the learners' performance.

After the statement of objectives, the next step is to select learning experiences which will be conducive to achieving the objectives. At this stage, the knowledge of the needs of the target population and the locally available resources will be useful. A careful analysis of the learning experiences and their hierarchical arrangement should follow. This will give the information necessary to determine the prerequisite and the order of instruction.

The module developer is now ready to select the format of the module and the components to be included in the module. In deciding the format and the components of a module, it will be useful to draw a

mental picture of the learning situations. It is at this stage that the decision may have to be taken as to whether the module be fully or partially self-contained and individualized.

Actual draft writing comes next. This step requires talent in creative writing. Plain, direct language is necessary to make modular material readable, and directions should always be clear.

After the first draft has been written, it should be carefully edited. The draft has to be edited with special attention to the content, the components and the format.

3. The revision stage. The manuscript should be reviewed with special attention to the format, the components, the editing and errors. The text too may be revised. After correction and revision, copies should be made for individual try-outs.

The purpose of the try-outs is to check the adequacy of the draft module in terms of readability, difficulty level and content organization. The adequacy of test items may also be checked. It is desirable to test the module on as many students as possible, carefully selected from the target population, representing slow learners, fast learners, and average students. The module developer can judge the adequacy of the the module from their performance and make necessary corrections.

Through a small scale try-out, wider, more reliable information on the module will be obtained than is possible in individual try-outs. There is no fixed sample number for a small-scale try-out, but statistical practice tells us that a sample of around 30 potential learners is adequate. After the small-scale try-out, the draft module may be revised. If the results of the small-scale try-out are still not satisfactory, a series of small-scale or large-scale try-outs can be mounted and necessary modifications made.

After completion of the try-outs and the necessary modifications, the module is ready for printing.

In brief, the process of module development is as follows:

a) Identify the needs of the target population and choose the topic.

b) Collect relevant information on the topic and verify the necessity for developing a new programme or module.

c) Make plans for developing the module.

d) Formulate objectives of the module based on the results of an assessment of needs.

e) Select the learning experiences that can best achieve the objectives and arrange them in logical order.

f) Decide the format and components of the module.

g) Write a draft module.

h) Review the draft module and make revisions.

i) Select at least three students, each representing fast, slow and average learners, from the target population and test the module on them. Revise the module according to the results obtained from the test.

j) Conduct further small-scale or large-scale try-outs and make suitable revisions, if and when necessary.

k) Print the manuscript.

B. Writing a module

A module has various components. They are:

1. The title;
2. The introduction (including the background and retionale);
3. The overview;
4. The instructions to the users;
5. The pre-test, evaluation and feedback;
6. The objectives;
7. The learning activities;
8. The formative tests, evaluation and feedback; and
9. The summative test, evaluation and feedback.

Some details of these are presented in the chapter on distance teaching. Only some principles underlying the design of learning activities are presented here for their general applicability in curriculum development.

The learning activities: Learning results in a change in the behaviour of the learner. If the entry behaviour of the learner and his terminal behaviour are the same, one cannot say that learning has taken place. A change in behaviour is therefore concrete evidence of learning.

A change in the learner's behaviour is a result of learning experiences which may be consciously planned in an institutional set up, or provided through flexible programming outside the institution, or they may be incidental. The first category of experiences is provided through formal learning, the second through non-formal learning and the third results from informal learning. The teacher's main concern is to create conditions for formal and non-formal learning, keeping in mind the effects of incidental learning on learners.

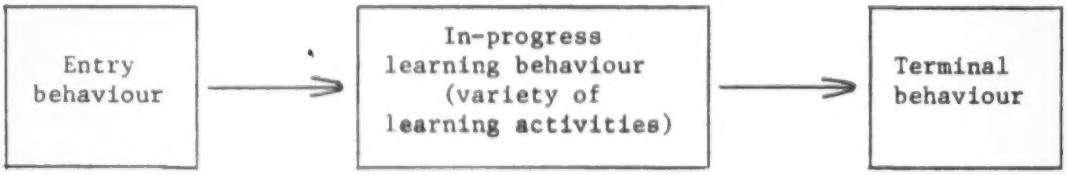
Learning experiences are provided through well planned, sequential activities. These activities enable a learner to bring about a shift in his behaviour in the predetermined direction: they are enabling activities provided to the learner for the achievement of insturctional objectives. These enabling activities are also called learning activities.

Principles underlying the planning of learning activities.

First it is most essential that the learning activities be planned on the basis of the entry behaviour of the learners. Entry behaviour means the previous knowledge of the learner relevant to the instructional objectives.

The second principle is to base the learning activities on the terminal behaviour, i.e. the sought-after behavioural changes. The terminal behaviour is the ultimate outcome of the learning activities. These activities can be planned well only if the desired end is kept in view.

Schematically it can be represented thus:



The third principle is to base the learning activities on the needs of the learner. The learner must see why he should study something. Learning will be meaningful only if he feels the need to learn. That is why he should know the results of the pre-test and the ultimate behavioural changes which are planned.

The fourth principle is careful gradation. The learning activities should be so designed that the learner will proceed step by step each activity being in some way more difficult than the previous one.

The fifth principle is to provide for individual differences. The activities should enable the student to learn in the manner and at the speed best suited to him. The activities should provide for freedom and flexibility in the learning process.

The sixth principle is to provide for adequate practice. All the learners must practise a variety of activities to attain the behavioural objective. Though each of the learner may take his own time, the ultimate behavioural changes should be accomplished by most of them.

The seventh principle is to provide the learner with the knowledge of his progress. The activities must let him know, as he proceeds, whether or not he is performing correctly. Frequent evaluation by himself will help him to stay on the correct path to achieve the objectives.

Varieties of learning activities. The enabling activities may be highly varied in the use of different media, modes, content, approaches and models.

First, the learning activities may follow a multi-media approach. The learning activities would thus provide the learner with experiences which are multi-sensory in nature. The learner would be exposed to a variety of experiences which may be everbal or audio-visual in nature.

Second, the activities may be multi-modal in nature. These modalities are lectures, discussions, small group discussions, seminars, workshops, symposia, panel discussions and other methods.

Third, the activities may be multi-content in nature. In other words, the content of the learning activities may comprise different levels of sophistication, and different levels of difficulty in the resource materials. In this case, the learner would be encouraged to choose that activity which best suits his capacity and interests.

Fourth, the activities may have different approaches. These approaches may be through writing, speaking, viewing, listening, reading, manipulating, project work, field work and practical work.

Fifth, the activities can follow different models. The first model permits the learner to progress at his own pace which may be different from that of others. There are no alternate paths provided for individual learners, but the learner is free to take his own time to reach the goal. The second is a series of alternate activities of different kinds in a package. The learner is free to select any kind and progress at his own pace. This model provides greater freedom to the learner and more flexibility in learning. The second model is more individualized than the first.

C. Modules in education management

There is some difference in Asian countries in relation to people involved in educational planning and the extent to which educational administrators participate in planning. Also planning is organized in a number of ways. Broadly the client groups of educational planning may include institutional level planners (schools, colleges, etc.), local level planners (regional, district or state levels), national level planners and policy makers. Using the list of the 30 content areas suggested by IIEP, the Consultative Meeting held by Unesco in December 1979 at Bangkok on Development and Testing of National Training Material in Educational Planning and Management suggested a matrix of training needs and modular appropriateness for these levels. The matrix is presented in Appendix 6.1.

The matrix focusses on educational planning. A suggested list of training modules for different categories of education managers is presented in Appendix 6.2. This Appendix also presents a classification of education managers and also a matrix of appropriate training modules for each category.

Appendix 6.3 gives an illustration of the design of a training programme and its contents, as well as a list of distance training modules developed by various countries in the Region.

Appendix 6.1

Training Needs in Educational Planning: A Matrix

Content Areas[1] / Clientele Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21-24	25	26	27	28	29	30
Policy-makers	A 1	A 3	A 2	A 2	A 2	A 2	A 3	A 1	A 3	A 3	A 3	A 3	A 3	A 3	A 1	-	-	-	-	-	A 1	A 1	A 1	A 1	A 1	A 1	A 1
Senior Administrators at Central level	A 2	A 2	A 2	A 2	A 2	A 2	A 3	A 1	A 1	A 3	A 3	A 3	A 3	A 3	A 3	A 2	A 3	A 3	A 3	A 3	A 1	A 1	A 1	A 1	A 1	A 1	A 1
Professional specialized planners	A	A	A	A	A	A	S	A	S	S	S	S	S	S	S	A	S	S	S	S	S	S	S	S	S	S	S
i. Central Planning Agency	1	1	1	1	1	1	3																				
ii. Ministry of Education	A 1	A 1	A 1	A 1	A 1	A 1	S 1	S	S	S	S	S	S	S	S	A	S	S	S	S	S	S	S	S	S	S	S
iii. States/ Provinces	A 1	A 1	A 1	A 1	A 1	A 1	S 1	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Senior administrators at State/Provinces/Region level	A 2	A 2	A 2	A 2	A 2	A 2	A 3	A 1	A 1	A 2	A 2	A 2	A 2	A 2	A 2	S 1	S 2	S 2	S 2	S 2	S	A 1	A 1	A 1	A 1	A 1	A 1
District Education Officers	A 2	A 2	A 2	A 2	A 2	A 2	S	S	S	A 2	A 2	A 2	A 2	A 2	A 2	S 2	S 2	S 2	S 2	S 2	S 2	A 2	A 2	A 2	A 2	A 2	A 2
Institution Heads	A 3	A 3	A 3	A 3	A 3	A 2	A 3	S	S	-	-	-	-	-	-	A	A 3	A 3	A 3	A 3	S	A 2	A 2	A 2	A 2	A 2	A 2

1. Refer to the list of training modules in educational planning (given in next page)

Note: S = Skill unit; A = Appreciation unit; 1 = Most important; 3 = Least important.

Appendix 6.1 (Contd.)

Training materials in educational planning: Proposed list of self-study modules.

Book I : Objectives and process of planning

1. Education as an agent on development.
2. The educational planning cycle, and planning approaches.
3. Economics and educational planning.
4. Sociology and educational planning.
5. Pedagogy and educational planning.

Book II : Diagnosis as the first step in planning

6. Extent and distribution of educational opportunity.
7. Student flow analysis.
8. Cost and expenditure analysis.
9. Personnel and facilities.

Book III : Formulating the plan

10. Trends and targets.
11. Projecting enrolment.
12. Projecting demand and supply of teachers and other resource persons.
13. Projecting building requirements.
14. Costing the plan.
15. Feasibility testing.

Book IV : Elaborating the plan into projects

16. School mapping.
17. Identification and preparation of projects.
18. Cost-benefit analysis.
19. PERT as a tool in project preparation, and monitoring.
20. Programme budgeting techniques.

Book V : Evaluating the plan (21-24)

Units to be developed.

Book VI : Planning for educational reform

25. Education, work and employment.
26. Planning education for rural development.
27. Planning of non-formal education.
28. Planning to reduce disparities.
29. Towards participatory planning.
30. Educational information systems, statistics, research and planning.

Appendix 6.2

Training Modules for Educational Managers

A. Some training modules in education management:

1. Defining short and long-term institutional objectives.
2. Identifying tasks and task structures.
3. Facilities planning.
4. Manpower planning.
5. System planning.
6. Curriculum planning.
7. Organizational structure.
8. Academic systems and systems management.
9. Management planning and information systems.
10. Personnel recruitment.
11. Officers' evaluation and development.
12. Management of research.
13. Managing support systems.
14. Staff evaluation and development.
15. Financial management.
16. Hostel management.
17. Library management.
18. Student admissions.
19. Managing examinations and assessment.
20. Placement and transfers.
21. Educational supervision.
22. Staff associations and employee relations.
23. Organizing student activities.
24. Community participation in educational planning.
25. Interface of educational organizations with the environment.
26. Resource mobilization.
27. Initiating and managing change.
28. Organizational self-renewal.
29. Decision-making in education.
30. Team development and team management.
31. Managing expansion.
32. Managing academic motivation.
33. Voluntary institutions and their management.
34. Managing autonomy and autonomous institutions.
35. Training techniques and teaching methods.
36. Managerial styles and effectiveness.
37. Office management.
38. Time management.

39. Performance budgeting.
40. Conflict management.
41. Extension activities.
42. Project identification and formulation.
43. Monitoring and information systems for project management.
44. Project evaluation.
45. Feedback systems for organizational planning.
46. Role of educational institutions in development and social services.
47. Institution building.
48. Role stress of education managers and their coping styles.
49. Management of stores, purchases and inventories.
50. Organization of campaigns and mass movements.

B. Categories of educational planners and managers.

No.		
1.	Policy makers	Politicians, advisers at central level, secretaries or directors in ministries in countries where they participate in top level policy-making.
2.	Educational planners	Chief executives of education at central levels, planning department heads and other officials from education as well as other departments involved in preparing national level plans.
3.	Senior executives, heading central education systems	Directors of education who are overall heads of the education system in a given region or for the nation as a whole.
4.	Educational supervisors.	Regional or local level officers involved in supervising schools, preparing local plans, and managing educational activities in a specified region with very little say in planning etc.
5.	Institutional heads (school education)	Headmasters and principals on schools (primary and high schools),
6.	Institutional heads (higher education)	Heads of schools, colleges, technical institutions, research centres etc.
7.	Heads of large systems	Vice-chancellors, directors of national institutes of research and training, etc.
8.	Heads of university departments	Heads of small size discipline-based units
9.	Support system heads	Registrars, administrative officers, controllers, office superintendents, secretaries of institutes, etc. those who manage support staff.

C. A matrix of training requirements for various categories of educational managers.

Code: G = General information and orientation is sufficient.
D = Indepth knowledge in that area is needed.
S = Indepth knowledge and skills need to be developed.
N = This module is not necessary for this group.

The module numbers correspond to the numbers mentioned above. The number of the category of education managers correspond to the categories given earlier.

Module	Category of Education Managers								
	Policy makers	Education planners	Sr. executives	Ed. sups.	Inst. Heads	H.E. Inst. Heads	Heads of large systems	Heads of various Depts.	Support staff
	1	2	3	4	5	6	7	8	9
1	N	G	G	D	S	S	S	S	N
2	N	G	G	D	S	S	S	S	N
3	G	D	D	D	D	S	S	D	N
4	G	D	D	D	D	S	S	D	N
5	G	D	D	D	D	S	S	D	N
6	N	D	D	D	D	S	S	D	N
7	N	G	G	D	S	S	S	S	G
8	N	G	G	G	S	S	S	S	G
9	G	S	S	S	S	S	S	S	S
10	N	N	S	S	S	S	S	S	N
11	G	G	G	D	S	S	S	S	N
12	N	G	G	D	S	S	S	S	N
13	N	G	G	D	S	S	S	S	S
14	N	G	G	D	S	S	S	S	S
15	G	D	D	D	S	S	S	S	S
16	N	N	N	N	D	D	D	D	S
17	N	N	N	N	D	D	D	D	S
18	G	D	D	D	S	S	S	S	G
19	G	G	D	S	S	S	S	S	S
20	D	S	S	S	G	G	G	G	G
21	N	G	G	S	S	S	S	S	N
22	G	D	S	S	S	S	S	N	S
23	N	G	G	G	D	D	D	D	D
24	S	S	S	S	D	D	D	D	N
25	G	D	S	S	S	S	S	S	N

Module	Category of Education Managers								
	1	2	3	4	5	6	7	8	9
26	G	D	D	D	D	D	S	D	N
27	D	S	S	S	S	S	S	S	S
28	N	G	G	S	S	S	S	S	S
29	S	S	S	S	S	S	S	S	S
30	G	G	D	S	S	S	S	S	S
31	G	D	S	S	S	S	S	S	S
32	G	G	G	D	S	S	S	S	N
33	D	D	D	D	N	N	N	N	N
34	G	G	G	D	S	S	S	S	G
35	N	G	G	D	S	S	S	S	G
36	N	N	D	D	S	S	S	S	S
37	N	N	D	D	S	S	S	G	S
38	N	N	S	S	S	S	S	S	S
39	G	S	S	S	S	S	S	S	S
40	D	S	S	S	S	S	S	S	S
41	G	D	D	D	S	S	S	S	G
42	N	G	D	S	S	S	S	S	G
43	N	G	D	S	S	S	S	S	G
44	N	G	D	S	S	S	S	S	G
45	N	S	S	S	S	S	S	S	N
46	D	D	D	D	D	D	D	D	G
47	N	N	S	S	S	S	S	S	N
48	N	N	S	S	S	S	S	S	S
49	N	N	N	N	G	G	G	G	S
50	D	D	G	N	N	N	N	N	N

Note: This matrix is only suggestive and may differ from country to country.

Appendix 6.3

Training Modules and Units

One design of a training programme and one module are given here as examples. Each module is a self-contained unit, requiring details of its organization and teaching. Lists of distance training units developed in and available from various countries in the region are also given in this section.

A. A sample degisn of a general management programme

For: Senior executives of a State department of education.

Duration: Two weeks (Residential Programme)

Objectives: By the end of the programme the participants would be able to do the following:

a) Prepare and plan in relation to various educational activities including a definition of project objectives, estimation of human and material resources required, designing organizational structure and systems.

b) Develop a system of monitoring a given educational activity.

c) Identify opportunities for application of computer-based information systems.

d) Identify opportunities for application of scheduling methods (PERT, CPM, etc.) in their settings.

e) Prepare PERT chart for any given programme or project they are handling.

f) Identify situations that require participative decision-making.

g) Use force-field analysis of participative problems that involve participative decision-making.

h) Develop positive orientations to the use of new techniques through an analysis of their own behaviour.

Programme design

Day	Session title	Activities/Assignment
1st	1. Inauguration Introduction	Presentation of an overview of the programme.
	2. Administration of instruments	Computation by the participants of instruments dealing with some behavioural aspects of managerial effectiveness, e.g., Locus of Control, Ambiguity Tolerance, Interpersonal Trust, A Change Proneness, etc.
	3. Force-field analysis	Presentation of the technique of force-field analysis for problem analysis with an example.
	4. Force-field analysis of the education scene in their state	Application of force-field analysis to select problems (Group Work)
2nd	1. Locus of control	Feedback and discussion
	2. Force-field analysis	Group Work
	3. Force-field analysis	Group Work
	4. Presentations	Presentation by each group of the analysis of one issue.
3rd	1. Behavioural dimensions in effective decision-making.	Feedback on instruments.
	2. PERT and CPM	Lecture-discussion.
	3. PERT and CPM	Lecture-discussion.
	4. Application of PERT	Group work on identifying the scope of use of PERT and design PERT charts.
4th	1. Group work on applications of PERT	Group work in projects.
	2. Presentations and discussions.	Plenary.
	3. Presentations and discussions.	Plenary.
	4. Desert survival exercises.	An exercise on decision-making by concensus.

5th	1. Management Information system.	Lecture-discussion.
	2. Computer models for managing teacher transfers.	Case discussion.
	3. Computerized transfers-policy implications.	Case discussion.
	4. Data requirements for computerized personnel management.	Group work.
6th	1. Data requirements for computerized personnel management.	Group work.
	2. Data requirements for computerized personnel management.	Group work.
	3. Presentations and discussion.	Plenary.
	4. Presentations and discussion.	Plenary.
7th	Sunday	Holiday.
8th	1. Locational models 2. Computer work 3. Computer work 4. Computer work	Case discussion on locating schools. (Computer practicum on the basis of problems and data).
9th	Computer work	Practicum.
10th	1. Project planning technique.	Class-discussion.
	2. Project planning technique.	Case discussion.
	3. Project planning technique.	Group work.
	4. Project planning technique.	On detailed district plan for non-formal education, adult education, etc.

11th	1. Project planning	On detailed district plan for non-formal education, adult education, etc.
	2. Presentations	Plenary.
	3. Presentations	Plenary (Report on PERT, CPM, etc).
	4. Monitoring systems	Discussion of Project plans.
12th	1. Monitoring systems	Discussion of Project plans.
	2. Evaluating education projects.	Case-discussion.
	3. Evaluating education projects.	Lecture-discussion.
	4. Applications	Discussion taking one of the examples above.
13th	1. Managing change	Case discussion (e.g., Introducing PERT)
	2. Action plans 3. Action plans	Individual action plans on use of techniques learnt.
	4. Review and concluding session.	

B. Laboratory on decision-making skills

Objectives:
a) To provide knowledge about different styles of decision making and their effectiveness for different situations.
b) To increase understanding of factors contributing to effective decision-making in educational settings.
c) To increase awareness of own decision-making styles and implications for effectiveness.
d) To develop skills of analysis task structures and prepare a decision-style chart.

Duration: One week.

Participants: All levels of educational administrators.

Day	Session title	Methodology/Activities
1st	1. Opening session.	Microlab.
	2. Administration of instruments.	1. Who am I? 2. Tolerance for ambiguity. 3. Decision styles inventory. 4. Leadership styles questionnaire, etc.
	3. Exercise on decision-making tasks.	Work in homogeneous groups to an exhaustive list of all decision situations.
	4. Exercise on decision-making tasks. 5. Styles of decision-making.	Concept session and feedback on decision-styles inventory and discussion.
2nd	1. Leadership styles and effectiveness. 2. Concept and discussion	Role play exercise with effectiveness of decision-making under three difference styles.
	3. Role of expectations in decision-making.	Tower building game.
	4. Discussion and Exploration of styles.	Encounter group.
	5. Exploration of styles.	Encounter group.
3rd	1. Exploration styles.	Encounter group.
	2. Exploration styles.	Encounter group.
	3. Exploration styles.	Feedback on Instruments.
	4. Decision-making in group.	Desert survival.
	5. Decision-making in group.	Exercise.
4th	1. Exploration of styles.	Encounter group.
	2. Exploration of styles.	Encounter group.
	3. Exploration of styles.	Encounter group.
	4. Collaborating and 5. competition in decisions-making.	Win as much as you can exercise.
5th	1. Experimenting with new styles.	Role play exercises.

Day	Session title	Methodology/Activities
	2. Experimenting with new styles.	Role play exercises.
	3. Experimenting with new styles.	Role play exercises.
	4. Identification of decision-making styles for their task situations.	Group work.
6th	1. Presentation of decision-making process 2. Matrix proposed by different participant groups. 3. Concluding session.	Plenary.

C. Distance teaching modules prepared by Unesco, ROEAP

Book I Basic concepts and considerations in educational planning and management.

Unit
1. Development as the objective of planning and management.
2. Planning and management as key agents of national development.
3. Educational development - the task of educational planners and administrators.
4. Demographic considerations in educational planning.
5. Economic considerations in educational planning.
6. Socio-political considerations in educational planning.
7. Educational considerations in educational planning.

D. Distance teaching material used for the Second Correspondence Course in Educational Planning and Management in India by the National Institute for Educational Planning and Administration.

Book I Background and basic concepts.

Unit
1. Development of education in India since indepedance.
2. Educational administration in India: A panoramic view.
3. Overall educational planning in India:Retrospect and prospect.
4. Concepts of basic approaches to educational planning.
5. Economics of education.
6. Education, employment and manpower.

Book II Introduction to educational management.

Unit 1. What is management?
2. Organization.
3. Control.
4. Decision-making.
5. Problem-solving.
6. Human relations: Communication.
7. Human relations: Motivation.

Book III Current Issues

Unit 1. Universalization of elementary education.
2. Education of women.
3. Education for integrated rural development.
4. Non-formal education.
5. Quality and relevance in education.
6. Planning vocationalization of education.
7. Environmental and population education.

Book IV Planning.

Unit 1. Collection of statistics and statistics needed for educational planning.
2. Statistical methods: I
3. Statistical methods: II
4. Educational planning process.
5. Formulation of an educational plan.
6. Project identification and formulation.

Book V Implementation.

Unit 1. Financial management.
2. Personnel administration.
3. Inspection and supervision.
4. Educational planning at the district and block levels.
5. Institutional planning and management.
6. Plan evaluation.

Book VI Challenges and responses.

Unit 1. International educational scene.

2. Indian concepts and models of educational development.

3. Curriculum reforms.

4. School library service.

5. Managing educational innovations.

6. Education of scheduled castes/scheduled tribes.

E. Materials used in Indonesia for the special training programme in principles of educational management, 1977-78.

Book I Basic concepts and considerations in educational planning and management.

Unit 1-5 Adopted from Book I of Unesco, ROEAP.

Book II Concerns and challenges in educational development.

Unit 6-10 Adopted from Book II of Unesco, ROEAP.

Book III General principles of management.

Unit 11-15 Adopted from Book VI of Unesco, ROEAP.

Book IV Principles of educational management.

Unit 16-20 Adopted from Book VII of Unesco, ROEAP.

Book V Prospects and problems of educational management in Indonesia.

Unit 21. Policies and legal basis of Indonesian education.

22. Structure and organization of the educational system.

23. Educational management in Indonesia.

24. Educational planning in Indonesia: Its organization, process and status.

25. Operational problems in educational management.

F. Materials used in Nepal for the distance teaching programme in educational planning and management.

Part I Educational planning and management.

Unit 1. Education plan for national development.

2. Objectives of education plan and constraints difficulties in planning.

3. Process of educational planning.

4. Economic basis of educational planning.

5. Educational planning in Nepal.

6. Integration of educational planning with overall development planning.

7. Democratization of educational planning.

8. Planning of non-formal education.

9. Placeof research in educational planning.

10. Qualitative improvement in education.

Part II Educational planning and management.

Unit 1. Diagnostic techniques: Student flows.

2. Diagnostic techniques: Financial analysis.

3. Projection techniques: Enrolment.

4. Projection techniques: Personnel.

5. Projection techniques: Facilities.

6. Basic principles of education management.

7. Organization.

8. Control.

9. Planning, programming and budgeting system (PPBS)

10. Plan evaluation.

11. Elaboration of education plans, programming and project identification.

G. Materials used in Pakistan for the correspondence course in Educational planning and management.

M.A.(Part I) EPM 502 Processes of educational planning.

Unit 1. Statistics as a tool for educational planning.

2. Collection, processing, storage and retrieval of educational statistics.

3. Computational techniques in educational planning.

4. Diagnostic techniques: Student flows.

M.A.(Part II) EPM 502 Processes of educational planning.

Unit 5. Diagnostic techniques: Financial analysis.

6. Diagnostic techniques: Personnel and facilities.

7. Projection techniques: Enrolment.
Projection techniques: Personnel.
Projection techniques: Facilities.

8. Projection techniques: Costs and resources.

M.A.(Part III) Processes of educational planning.
EPM 502

Unit 9 Educational planning process, objectives and constraints.

10. Diagnostic stock-taking.

11. Policy formulation: Assessment of future needs.

12. Establishing priorities and setting targets.

13. Establishing priorities through cost-benefit analysis.

14. Mathematical models and their use in educational planning.

15. Data requirements for the application of the educational simulation model.

16. Educational simulation model - Evaluation of the experience.

H. Materials used in the Philippines for the correspondence course in educational planning and management.

Book I Background information on educational planning and management.

Lesson 1. Fundamental concepts of educational planning.

2. Foundations of educational planning.

3. Educational planning at the national and sub-national levels.

4. Educational planning at the institutional level.

Book II Trends in educational planning.

Lession 1. History of educational planning in the Philippines.

2. Planning for quality.

3. Planning for non-formal education.

4. Participatory planning.

5. Integrated planning.

6. Decentralized educational planning in the Philippines.

Book III Process of educational planning.

Lesson 1. Systems analysis approach.

2. Educational planning process.

3. Feasibility testing.

Book	IV	Plan elaboration.
Lesson	1.	Identification of programmes and projects.
	2.	Project formulation.
	3.	School mapping and educational mapping.
Book	V	Quantitative aspects of educational planning.
Lesson	1.	Basic statistical tools.
	2.	Computational techniques in educational planning.
Book	VI	Financial aspects of educational planning.
Lesson	1.	Budgeting: Its implementation to educational planning.
	2.	Planning, Programming, Budgeting System (PPBS) and other innovations in budgeting in the Philippines.
	3.	Costing of educational plan.
Book	VII	Implementation and evaluation.
Lesson	1.	Communication in educational planning.
	2.	Plan evaluation.
Book	VIII	Management techniques applicable to educational administration.
Lesson	1.	General principles of management.
	2.	Programme Evaluation and Review Technique (PERT)
	3.	Management by objectives.
	4.	Educational futurism.

I. <u>Materials used in Thailand for the basic training programme in educational planning and management</u>.

Volume I	Basic ideas and points in educational planning and management.
Unit 1-7	Adopted from Book I of Unesco ROEAP and translated into Thai language.
Volume II	Procedures in educational development.
Unit 8-14	Adopted from Book II of Unesco ROEAP and translated into Thai language.
Volume III	Quantitative aspects of educational planning.
Unit 15-21	Adopted from Book III of Unesco ROEAP and translated into Thai language.
Volume IV	Procedures in educational planning.
Unit 22-28	Adopted from Book IV of Unesco ROEAP and translated into Thai language.

Volume V	Educational plans and how to implement them.
Unit 29-35	Adopted from Book V of Unesco ROEAP and translated into Thai language.
Volume VI	Procedures in management.
Unit 36-42	Adopted from Book VI of Unesco ROEAP and translated into Thai language.
Volume VII	Principles in educational management.
Unit 43-48	Adopted from Book VII of Unesco ROEAP and translated into Thai language.

Chapter Seven

SELECTING TRAINING MODALITIES AND METHODS

Once training needs have been identified and contents of training have been finalized (the curriculum has been formulated), the main question remains as to how learning should take place. How can the curriculum produce the necessary changes in the individuals, whether these changes are in terms of more knowledge, improved skills, better understanding, changed attitudes or news of behaviour? This question - how to transfer curriculum into individual learning - relates to training modalities and methods.

A distinction may be made between modalities and methods. A modality is a wider concept, in which more than one method can be used. A modality is a general approach and strategy of designing and sequencing training inputs to produce the desired effectiveness. We suggest three main bases of distinguishing modalities: contact with learners, formalization of learning, and management of learning.

Contact vs. Distance modality.

Two modalities of learning can be distinguished based on how much use is made of the contact with the learners. Contact training or learning modality uses continuous contact between the trainer and the learner. Distance training or learning modality emphasizes the need of reaching a large number of learners, not necessarily related to trainers in a face-to-face contact relationship. Distance training is increasingly becoming important. It has been realized that education can not be spread unless we take steps to reach the learners wherever they are. The model of bringing the learners at one place for learning in a face-to face-situation can not help us spread education very fast.

In the first place, the resources in any country are limited to bring everyone into training. It would be impossible to train all the administrators in the ministry and departments of education at a faster rate with this modality (bringing them to a common place for training for, say, at least two weeks). In the second place, the various organizations can not agree to send all their administrators at various levels to the training programmes. The organizations usually phase out their administrators for deputation to training. Thirdly, it would be difficult for every administrator to learn at the same pace. Each one has his own problem, his motivation, his background. Face-to-face training or contact training does not take into consideration these factors.

In view of all these reasons, distance teaching is being recognized as an important training modality to cope with the training needs of all the administrators. Correspondence courses have been in existence for a long time. However, the concept of distance training or distance learning is a wider concept. It includes not only the training in cognitive areas through correspondence programmes, but it also utilizes various other ways of improving it. However, correspondence courses and distance teaching are for all practical purposes used synonymously.

Distance teaching consists in identifying training needs of a group, preparing relevant curriculum to be able to meet these training needs, preparing various modules which can be used by the learner for a graduated learning experience, preparing ways of reviewing the progress of the learners and giving feedback to them on what they have been able to learn well and where they need to improve further, supplementing cognitive learning (which is possible through material being sent to people) with some other methods, and reviewing the final learning outcome. In the next part we have included a chapter on distance training as it is one of the most important modalities.

Formal vs. Nonformal Modality

Training can be organized in the form of formal programmes, either in the form of programmes conducted at a particular centre, or by distance training arrangements. In the formal modality there is a specific body organizing the training and there is a fixed syllabus. The non-formal modality is an unorthodox approach to training. Training may be conducted by developing action research programmes, and the administrators may learn many things through their active participation in such programmes.

In the non-formal training or learning modality, emphasis is given on experience, and creative and innovative devices are used to convert ongoing experiences into learning opportunities, or in creating new experiences, not primarily for training, but for solving some problems, but where learning is not ignored. This does not mean that any experience is education or training, although every experience has learning potential. Education or training involves a conscious and deliberate attempt to learn from an experience. Without such deliberateness, an experience can not be termed education or training.

A well known, and now increasingly popular, non-formal modality is Action Research (AR) or Organization Development (OD). These are well organized attempts to solve problems and increase capabilities of individuals and groups to confront problems and evolve appropriate solutions.

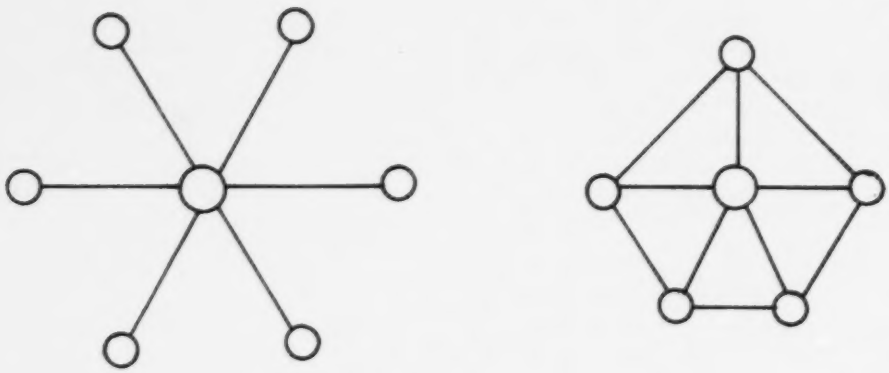
Wheel vs. Star Modality

One basis of training modality is the organization of training. Training can be centrally organized, and its organization may be in the shape of a wheel, the hub being the training organization, and the

various programmes with the various agencies being like the spokes of the wheel - all having relationship with the hub. A different, collaborative modality may take the shape of a star, in which the various organizations and agencies may be interrelated with one another, encouraging dyadic or triadic mutual arrangements. The shapes of the two modalities may take the forms as given in figure 7.1

Figure 7.1

Wheel vs. Star Modality



A star (collaborative) modality very well developed by ROEAP is the advanced workshop. This training modality has been spelled out in some details in the publication entitled: "Continuing Education for Teacher Educators" (ROEAP, 1978). The following objectives can be suggested for such workshops for education managers (these are adapted from the original list):

1. To create the need for innovations for development of education and management and planning of education, and to develop positive attitude towards innovative practices.
2. To identify and analyse problems of management and planning of education in the country and formulate strategies for introducing and managing innovations in education management.
3. To work out plans for the introduction of specific innovative programmes related to management of education for development.
4. To develop continuing education and self-renewal materials for education managers through team approach of analyzing and evaluating innovative programmes in education management.

5. To draw up plans for an in-depth evaluation of innovations in education management programmes and practices.

6. To provide a forum for education managers to identify the crucial issues in education management, to share their experiences in the attempted solutions of problems and to exchange ideas for making education management more effective and relevant.

7. To develop an awareness of current theories and practical courses in education management and examine their relevance to problems of education managers.

8. To develop confidence among education managers that education management practices can be changed through programmes of their continuing efforts at self-renewal; and

9. To undertake case studies of institutions, identify their strengths and limitations and prepare developmental plans for increasing their capability of continuous self-renewal.

These objectives are illustrative. The objectives of an advanced-level workshop may primarily be formulated in the light of local requirements and available resources.

When realized, the above objectives might possibly result in the following outcomes:

1. Education managers would try out innovative solutions through the process of problem-analysis and evaluation.

2. They would have developed the competence of planning, implementing and evaluating innovations for development.

3. They would continuously undertake self-analysis and plan and implement programmes of self-renewal.

4. They would engage themselves in collaborative efforts to improve management practices and the renewal of their own institutions and their self-renewal.

5. They would develop better confidence and self-reliance to deal with management problems in view of changing needs of the society.

6. They would plan programmes of staff-development in better and more systematic way.

7. They would develop a better understanding of the process of educational change and this would help them in meeting with unforeseen situations arising during the progress of innovation - implementation.

8. They would develop better skill in analyzing case studies of innovations and evaluating the same.

9. They would develop an attitude of learning new ideas and will become sensitive to respond to social change.

10. They would delegate powers and functions to those who administer programmes and institutions up to the grassroot levels, and use their roles more in supporting and providing facilities to those who implement the programmes.

Advanced workshops are collaborative efforts made within a country, bringing people for such workshops, and also within a region to exchange experiences and learn from them. ROEAP organized a number of such workshops for teacher educators in several countries in the region.

Criteria for selecting methods

While considering the various training methods available one should exercise judgement and select some methods which will help to achieve the goal of translating the curriculum into changes in the participants.

There are primarily two critieria to be kept in mind while selecting training modalities and methods. Each method has its own special features, characteristics, its advantages. Some methods are appropriate for certain dimensions while other methods may be appropriate for other dimensions. The appropriateness of a method for a particular requirement is one criterion which needs to be considered. For example, the use of expensive methods like simulation, or classroom discussions may not be useful for teaching simple information-related matters like knowledge of rules. For this purpose a good piece of writing which explains various rules, etc. may be sufficient.

The second criterion which is inter-related with the first is economy. This criterion has to be kept in mind particularly by the developing countries where resources are limited. Both trainer and material resources have to be optimized. One basic question to be raised while selecting the training modalities or methods is how resources can be properly utilized, and how these can be used for a large number of people. The economic use of resources, therefore, becomes an important criterion. As we shall see, from this point of view, distance teaching comes out to be an important training modality, since it maximizes the use of resources available in a particular country.

The selection of training methods would also involve consideration of how to make best use of various methods. Since each method has its own characteristics and advantages, it may be useful to think of combining various methods. Selection should not mean selecting only one method, and leaving out other methods. It should mean which would be the main method used, and how the limitations of that method can be made up by using other methods at a later time. This also means that selection should consider the sequencing of various modalities and methods. The selection process may indicate which modality will be used as a primary modality, and how various other methods or modalities can be used as supplementary modalities, so that the advantages of the various modalities and methods can be utilized. We shall illustrate this aspect more fully when we discuss the organization of distance teaching

in a later chapter.

Before we discuss the methods at present available to us, it may be useful to consider the criteria to be used while selecting the methods. The programme development workshop on educational planning and management organized by ROEAP, 1978 has suggested the following criteria for selection of appropriate training modalities and methods: the background, abilities and motivation of trainees; the size of the group; time available for training; the nature of training content; training facilities available; and efficiency with which teaching-learning can be provided.

Why do we want to select a training method ? The main purpose is to see that learning of the participants is maximized. Therefore we have to consider various conditions which should be met to help the participants learn. Below are suggested ten requirements which may help the participants to learn better. The participants should be helped to do the following in order to maximize their learning.

1. Know: The first requirement of learning and developing of the participants is to help them increase their cognitive skills, their ability to learn and know more things. Knowledge is power. Any change in behaviour or attitude without knowledge does not help a person develop further. The most important human characteristic is his cognitive ability, the ability to think, and know causal relationships amongst various things. A person is able to act effectively and change his institution or part of the world if he has better knowledge. This function can not be under-estimated.

2. Experience: Learning also requires that the person who learns experiences various things himself, rather than learning them at second hand. This is particularly true in relation to the skills. Unless the person has experienced certain things his understanding may be superficial, and the learning can not be internalized. Learning has to sink from the intellectual level to the inner level of himself. The person is able to experience things by facing them, working on them, rather than merely knowing them from a distance.

3. Experiment: Along with experiencing, actually doing an experiment with behaviour becomes important, specially if some skills are involved. A simple example is that of swimming. A person can not learn swimming merely by reading about it and having the knowledge of the laws of floating bodies. He needs to experiment himself by getting into water. The same is true about social skills and other skills. Experimentation is a very important aspect of change. Many methods are emphasizing the need of helping a person to experiment with his behaviour and know from such experience.

4. Reflect: A person who has experienced and experimented needs to internalize such learning by having some time to digest to think about it, to reflect upon it. Unless a person has an opportunity to reflect, and integrate in his cognitive background, his learning may remain loose, and may not get stabilized. Reflection helps a person develop his identity, and develop critical capability to see what is more relevant,

which part of learning can be discarded, which part can be used more effectively.

5. Practice: Along with experimentation of behaviour repeated practice of the behaviour is necessary. Skills can not be learned unless these are practiced. A person may not have very good experience at one time. However, in order to make the experience a natural part of the person, it is necessary that he practices enough what he has learnt.

6. Relate: It is necessary that the participant relates what he has learnt to what he does. If a person has learnt certain new things and if he is able to relate them to his job (what he has been doing), the learning will be much more effective. Such relationships between the new learning and the actual work the person is doing is necessary, otherwise the new learning remains isolated.

7. Pace: When the participants are involved in learning they work at different paces. Some participants are very fast in learning and quickly grasp what is being taught. Some others are slow in learning. If each participant can be helped to plan the rate of his learning and to have an opportunity to learn as much as he likes, reflect on it and internalize it, and go back to other aspects of learning, the learning can be quite effective. Methods have to be found to provide such pacing.

8. Get reinforced: When a participant gets feedback that what he learnt was right or wrong, his learning is accelerated. Reinforcement needs both in terms of feedback as well as in terms of appreciation and approval by the concerned authority. It has been shown that appropriate reinforcement of behaviour produces much more effect on the individual and leads to effective learning.

9. Share: Learning is accelerated when people having similar objectives and goals share several things together. Sharing would include discussing several dimensions of a matter, expressing doubts and clarifying such doubts, listening to others, etc. This process of both influencing others and getting influenced in turn is very helpful in accelerating learning. A person has the need to check several things with other people. He wants to express some doubts he may have. Such opportunities to share matters to express doubts, raise questions, etc. are helpful in accelerating learning.

10. Belong: A learner after he has learnt new things needs to develop a new reference group. People have a need of forming a group of persons having similar experience, similar interest or similar background. This tendency to form groups on the basis of some similarlity, and a desire to belong to such groups is very helpful in reinforcing learning. It has been shown that belonging to such new reference groups helps to stabilize learning to a great extent.

We shall later propose that while considering various training methods, these ten criteria, the conditions of learning, may be applied to find out which modalities and methods are strong on which dimensions. Then the process of selection can be considered.

Training methods

Let us now turn our attention to understanding the various training methods. It may be useful to understand the various pedagogical methods using some common dimensions, so that we may have a broad understanding of the classification of these modalities and methods on some basis. We have suggested three dimensions to be kept in view while classifying the training modalities and methods:

a) The amount of participant activity allowed in the modality or method.

b) the amount of emphasis on cognitive learning, and

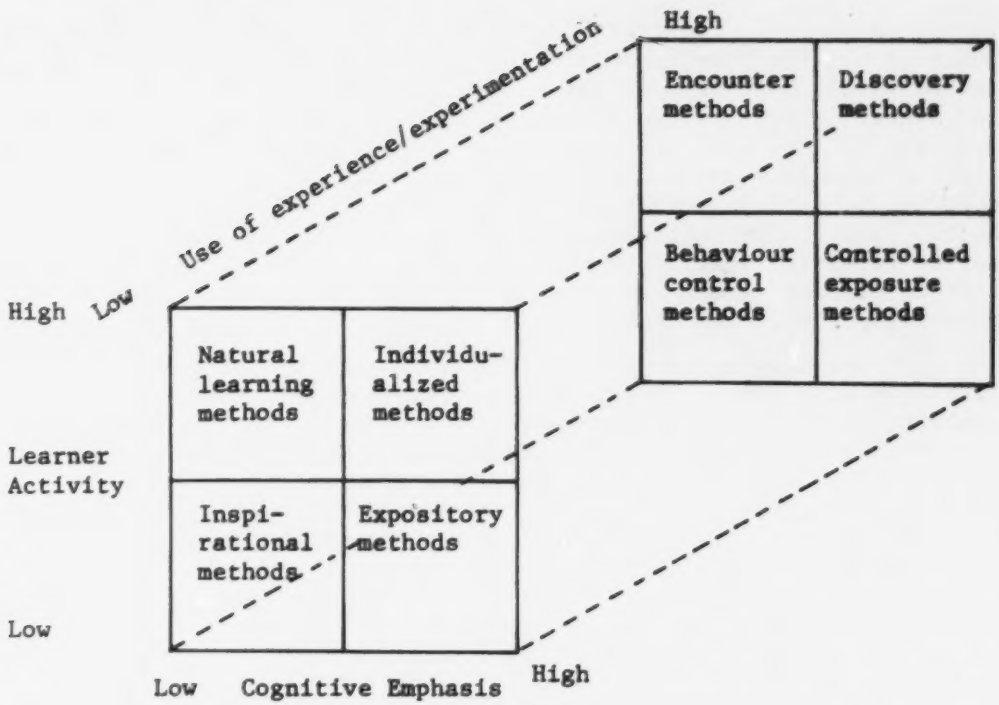
c) the amount of emphasis on providing experience to and scope for experimentation by the participants.

The participant-activity is not necessarily in conflict with trainer activity. The trainer's role remains central; he directs and controls all the learning activity. Even then the participant-activity can be either high or low. High level participants to take initiative and engage in various tasks on his own. The concern with cognitive activity is that the various kinds of learning should lead to the formation of new ideas and concepts, their reformation in a better understanding of certain phenomena. Emphasis on experience and experiment on the part of the participant indicates the position that learning can not be effective unless the participant is able to experience and also take initiative in experimenting either with outside phenomena (usually material) or with own behaviour.

Combinding these three dimensions a cube may be constructed. Each dimension may be conceived as a continuum from high to low. In order to simplify the understanding of the combination of the three dimensions, it is proposed that each dimension can be divided into two, high or low. A combination of these may give us three different typologies of training modalities and methods. These are shown in figure 7.2. The figure shows eight different typologies of such methods. These are briefly discussed below:

Figure 7.2

Typology of Pedagogical Methods



1. Inspirational methods: These methods are primarily based on high activity on the part of the trainer. Giving a sermon or a pep talk to a group of participants in the hope that this will change their attitudes and behaviour, is a good example of this methodology. In this methodology all the three dimensions are low.

2. Expository methods: In these methods cognitive emphasis is very high, while participant activity and emphasis on experiences is low. A good example of explository is the lecture method in which the trainer takes the main active part, and the main emphasis is on imparting cognitive information to the participants. The participants remain comparatively passive, and they have no opportunity to experiment or experience things.

3. Natural learning methods: The main rationale of these methods is that learning takes place in a natural way and in a natural setting, and that planning for learning is not necessary. Learners are left on their own, with free and unplanned activity. The emphasis on learner activity is high, whereas it is low on planned experience or on cognitive inputs. The following modalities are worth mentioning in this regard:

a) Trial and error learning: Under this learning no planned activity is done, and the learner is left to try on his own-learning from the mistakes and then try out new ways until he has learned the phenomenon.

b) On the job training: In this modality the participant is put on the job which he is required to do, and he learns from whatever experience he gains from the job. There is no emphasis on planned experiences or planned experimentation. All experience is in the natural form. The main emphasis is on learning from the natural setting of the job.

c) Discussion methods: Seminars, symposia and other forms of discussions can also be classified under this category. Natural groups are organized to discuss various topics and people express their views, share several things with each other, and they learn whatever they can from such discussion. It is hoped that providing such an opportunity will help people to learn.

4. Individualized methods: These methods are quite wellknown mainly through the popularity of the programmed instruction. The main characteristic of these methods is the guided search encouraged by the instructor or the programme. These methods are low on providing experience or experimentation by the learner, and are high on both participant activity and cognitive emphasis.

The following individualized modalities are worth mentioning:

a) Programmed instruction: The essential characteristic of programmed instruction is that it takes the participant at his own pace. The programmed instruction material are prepared with great care, after analyzing the content of a

programme. The programme instruction methods, whether in the form of programmed books, or teaching machines, are characterized by the following:

i. an ordered sequence of items of learning, taking the learner step by step, questions to be answered by the learner, immediate feedback whether the answer is right or wrong and why, minimizing chances of learners making mistakes, and providing enough practice of correct responses.

ii. Programmed instruction requires thorough preparation of material. Specialized techniques have been developed to prepare such material. We shall present some details in a separate chapter.

b) Training through mass media: The use of mass media like radio and television is also included in this method. It has its own limitations. Some training can be conducted through radio, television and other mass media like newspapers, journals, news-letters being issued by the department of education, circulars, and regular ways of communicating with the large number of people through some written media or oral form like the radio programmes. Such programmes are being repeatedly used to supplement training. However, as far as the educational administrators are concerned, training through these devices in developing countries, is very limited.

5. Behaviour control methods: These methods are based on the rationale that behaviour can be changed only by understanding how behaviour develops and why some behaviour gets stabilized in people so that it becomes a part of their habits. The use of psychology of learning is made in these efforts. These methods are very low on cognitive dimension and on the active participation of the learner. The main emphasis is on helping the learner experience, and experiment with, some behaviour. Two methods are worth mentioning here. In a recent survey of various methods used for training social skills, it has been observed that the two most effective methods of training of social skills are modelling and the reinforcement of behaviour. These are mentioned below:

a) Behaviour reinforcement: This method is based on the same theories of learning like those of Pavlov (conditioned reflex), or its further development and refinement by Skinner (called operational conditioning). According to these concepts such behaviour, if appropriately reinforced (rewarded in some form), a learner can acquire that behaviour very fast. The method used to change behaviour, therefore, is to prepare a schedule of reinforcement (reward) for the behaviour which is meant to be learnt. According to the schedule, each act of desired behaviour is reinforced (rewarded); and each act which is not in the desired direction is not reinforced or rewarded. A

continuous schedule of this type helps in developing proper behaviour. The application of this technique may be in the form of preparing several systems of reward and reinforcement for appropriate administrative behaviour in the organization, and lack of reinforcement for behaviour which is not appropriate. This may help the administrators acquire desired behaviour. As is obvious, this training does not produce any cognitive understanding in the learner, nor the learner is actively involved in generating learning situations. However, the learner is certainly experiencing various phenomena, and indirectly is encouraged to experiment.

b) Modelling: The second method which has been found to be most effective in training of skills is that of modelling. The influence of the trainer or the teacher has been recognized for a long time. However, in the past it was not realized that the participants are not influenced only by the individual teacher, but by the entire training atmosphere. In the training situation people learn from what is not directly taught much more than from what is directly taught in the class-room. They unconsciously learn many things from the experience they have of the trainer, the total group of faculty in an institution, the behaviour of the head of the institution, the general climate prevailing in the institution, and norms of behaviour which are practised rather than taught or talked about. The conscious efforts of presenting desirable behaviour either of the individual or of the group is called modelling. One implication of this method is that the training institutes have to pay attention to how they operate and what is done in the institutes. It also means that they have to consciously examine and analyze the possible or probable effects of various aspects of individual trainer's behaviour or of the total institute on the participants.

6. Controlled exposure methods: The low level of participation by the trainees, and a high emphasis on experience and cognitive learning characterizes these methods. Several methods expose the participants to new experiences, but do not have scope for the participants to directly manage their own experience. These methods have been called controlled exposure methods. We mention two such methods below:

a) Demonstration: This method has been very widely used in the training of administrators in agriculture, education and engineering. People are taken to a place where they are able to see the effects of certain things. Demonstration can range from a very simple one in the class-room, when a teacher shows some action and the participants who observe to complex demonstrations of certain things in a controlled area where experiments have been going on and where people can go and see for themselves the results of such experiments.

For example, in the teaching of agronomy or agricultural extension, experimental fields are prepared where a particular crop is grown or other practices are applied. People are taken to these fields to see for themselves the results of the new seed or other practices. This method is very effective in agricultural extension. The farmers who see the actual results of a particular variety of seed in a field are convinced about its usefulness; it may help them in adopting that variety. The main characteristic of this method is controlled experimentation or research of a particular practice, developing the experiment carefully, exposing the participants to such experiment and experience, and helping them to understand why the experiment succeeded.

b) Films: The use of films, or such other material like the closed circuit television, is another example of controlled exposure. When people can not be taken out for demonstration because such well controlled experience may not be available, or it may be too expensive to take people to a place where such experience is available, the same experience can be brought to the class-room through a film. When properly chosen, films help the participants to become aware of certain experiences and experiments, and they are able to see for themselves certain things which make an impression on them. Increasingly more and more films are being used in the class-room for demonstration.

The use of films has a great potential for training of an administrator. For example, it is useful to prepare films on various important topics like team building, managing conflicts, developing an institution, initiating new people in the organization, etc. Once energy, time and resources are invested in making the films, these are available to a large number of administrators for their training. Such an investment may be worthwhile. One danger in the use of films is that unless such films are developed for a particular country, or adapted from the existing films, or at least tested vigorously for their application, people are likely to use films developed in the western context by commercial organizations, and they may have limited value for developing countries. Selection of the films therefore is a very important dimension.

7. Encounter methods: These methods emphasize both experiencing by the learner as well as learner-activity. These methods are based on the assumption that learning can be achieved more effectively if the participants are able to experiment and prepare their own training material. Such methods are not high on cognitive learning. In fact, the main aim of these methods is to help the participant learn new behaviour and practise it. Several methods have been developed based on this concept. We mention below only a few important ones.

a) Laboratory training: The purpose of laboratory training is to provide to a group of participants an intensive experience about how they work together, compete with each other, and learn from each other. This is also called T (standing for Training) or L (standing for Learning) groups. Such groups have to be small, between 8 to 15. The main focus of T-groups or L-groups is to help the participants experience the process of dealing with authority, develop leadership behaviour, experience various methods of leadership development in the group, and experiment with their own behaviour as well as with the development of maturity in the group. Some excellent accounts of this method are available. This method seems to be very effective for producing basic attitudinal changes amongst participants, and in helping them in further learning.

A good laboratory training, which should be of at least five intensive days, can produce same basic changes in the attitude and behaviour of the participants. It can help them to learn further. The emphasis of laboratory training is on learning how to learn. One limitation of laboratory training is the need of a well trained and effective faculty. Unless those who run the laboratory training are thoroughly trained in the techniques of conducting such programmes, laboratory training may do more damage than good. Availability of such people may be a problem. Some of the organizations in various countries prepare trainers who can conduct such programmes. In India, the Indian society for Applied Behavioural Science is one such organization. No other Asian country has organizations exclusively devoted to preparation or processing of trainers and accrediting them for such skills. The second limitation is the high cost of this training in terms of the number of days required for the training and the condition of the group being small for this purpose.

b) Assertion training: Some other methods have been used to help people learn how to assert themselves without being aggressive, in-modest, and at the same time not yielding to the ideas and pressures of others. A variety of methods have been used in this regard. A similar type of training is called value clarification training, mainly designed to help people understand and develop their values effectively. In assertion training the main approach is to help the participant understand his current mode and behaviour and learn how this can be changed to a more aware and assertive one. Exercises for developing an assertive belief system, and procedures for cognitive restructuring, behavioural rehearsal, modelling and assessment are used.

c) Motivation development: Some programmes have been developed to increase motivation of people. The main rationale of these programmes is that people behave in a particular way,

because their thinking is dominated by some needs. These needs are reflected in the imagery they may create during day-dreams, dreams,or creative expressions like writing of stories, poems, dramas, paintings, etc. The main approach of this method is to help the participants analyze their motivation by taking samples of their imagery, and later to help them increase a particular content of motivation (need) in their imagery.

For examples, programmes have been prepared to increase achievement motivation (concern for excellence), or extension motivation (concern to serve and develop other people), power motivation (concern to influence and make an impact on others in order to develop institutions and organizations). Several training programmes have been tried out successfully for this purposes. We have included a sample module in the third part of the Handbook. The limitation of this method again is the availability of well trained people to conduct such programmes.

d) Creativity training: In creativity training the emphasis is more on helping people recognize their level of creativity, and develop an insight into the blocks which prevent them from being creative. Once they are able to have this insight, they experiment with the help of various techniques to become more creative in general, and in particular on their jobs. Creativity in work situation takes the form of non-conformative behaviour. Creativity training may be useful if the administrators have an opportunity not only to experiment with new practices, but also when they have opportunities to develop and use such practices. The limitation of this method is also non-availability of well trained faculty to conduct such programmes.

8. Discovery methods: When the emphasis is high on all the three dimensions, i.e. cognitive learning, activity by the learner, and experience and experimenting by the learner, we have methods in which people discover knowledge for themselves. These methods are very effective in producing change in behaviour. The rationale of these methods is that change in behaviour does not occur only by new experience and reinforcement, but also by the development of proper cognitive framework so that people learn why certain things happen, and they may be able to understand and advance their insight further. Several such methods are available as mentioned below:

a) Experiments: Some methods may encourage learners to experiment and learn from such experiments. The best examples are the experiments done in the science laboratory. However, the experiments done usually in the school science classes are not real experiments. The student knows in advance what conclusion he is likely to get, and he merely experiences that by handling certain things and verifying those. This is only one form of demonstration. The real experiment is

in higher science laboratories where the students are encouraged to develop some experiments, and they question some hypotheses and set-up new hypotheses. Experiments can be conducted in other fields like administration. Experiments in administration would imply encouraging a participant to develop some hypotheses and do somethings on his own so that he discovers certain things. Such a discovery is likely to be extremely stimulating and useful.

b) Field training: Field training is increasingly being used in training of the administrators. People go to a particular field, and observe for themselves, learn from such experiences, and bring their observations to review what they have learnt in detail. This method has great value. Without such practical experience and training, people may not be able to learn many things. We shall discuss this method in more detail in the next section in a separate chapter.

c) Case teaching: When people can not be taken to a field for studying some complex phenomena, the field can be brought in the class-room. This is done through the use of cases in training. A case describes an actual situation and its dynamics, and the various aspects of the situations are properly selected to help people learn a few things. Then the participants discuss the various dimensions of the case and learn for themselves various aspects involved in the case. We shall discuss case teaching and the various dimensions in the next section in more details.

d) Role playing: Role playing has been more extensively used in educational training. A particular situation is created in the class-room on a limited basis, and the roles involved in the situation are developed by giving proper instructions (role briefings) to the participants. Then the participants take up these roles and actually sit and work as if the situation was real, and play these roles to solve a particular problem, or deal with a particular situation. Role play has great advantages. It requires a very careful planning. Again, we shall have opportunity to discuss this in more details in the next section.

e) Behaviour simulation: When an entire experience is recreated in the class-room it is called simulation. Simulation means preparing a particular experience and reproducing it in an artificial way. This is done through a game, or an exercise, or through the use of computers. People then experience in a controlled way some aspects of the situation. Simulation has several advantages. We have devoted a chapter to this method in the next section.

f) Instrumented training: Instruments are usually used to test abilities, attitudes, personality, styles or behaviour. Such instruments can also be used for training. Instruments provide significant data which the participant can use to enhance their insights, and to prepare plans to experiment with new behaviour. Enough emphasis is also given on cognitive training. This is the least used training method, although it has great potential. We have, therefore, devoted a separate chapter to this method in the next section.

The balance sheet of the methods

Figure 7.3 gives a comparative view of eight training methods on the ten criteria discussed above. It may be seen from the Figure that the least effective method is "lecturing", and yet it is the most widely used method. It is necessary to move more and more towards participative methods - the methods in which individual participants are involved in some activity, and which can provide them opportunity to experience and experiment.

Figure 7.3

Comparison of some training modalities
and
Methods on criteria of learning

[5-point scale - 1 (least favourable) to 5 (most favourable)]

Criteria	Semi-nars etc.	Pro-gramme instru-ction	Lec-ture	Encoun-ter groups	Demon-stra-tive films	Beha-viour simu-lation	Case teach-ing	Field train-ing
1. Know	4	5	5	1	2	4	4	2
2. Experience	2	1	1	5	1	5	4	5
3. Experiment	2	1	1	5	1	4	3	3
4. Reflect	2	2	1	5	2	5	4	3
5. Practice	1	5	1	5	1	3	3	3
6. Relate	2	2	2	3	4	4	4	5
7. Pace	1	5	1	4	2	2	2	3
8. Get reinforced	1	5	1	5	1	4	4	3
9. Share	5	1	1	5	3	5	5	4
10. Belong	4	3	3	5	3	3	3	3

Several methods can be combined to get the advantages of those methods, and to make up the defeciencies of several of them. This will be illustrated in the chapter on distance training. For example, lectures can be enriched with small group work, discussions, etc.

Figure 7.4 presents comparison of these methods on five administrative criteria. While choosing a method, it is necessary to consider these factors. Higher the rating, the more favourable the method is for use on that criterion. For example on uniformity of training programmed instruction and distance training are the most favourable modalities. Training given through these methods will be very uniform. Similarly, this modality has favourable rating on time. Least-time is taken by the use of this method. Encounter groups, on the other hand, have the least favourable rating. They take a lot more time. The same is true for training expertise. No special expertise is needed. In the case of encounter groups, special training expertise is a pre-condition. Expertise is also needed in conducting behaviour simulation classes, or cases, or films. So they have low ratings on this criterion.

When we consider the 'special material' required for training, programmed instruction or distance training has the lowest rating - they can not be used unless very well planned material are available. Lecture, encounter group, and seminar require no special material; so they get high (favourable) rating. On the last criterion (coverage) distance teaching and programmed instruction get the highest (most favourable) rating, since a very large number of participants can be reached and trained at a particular time.

Figure 7.4

Comparison of some training modalities
and
Methods on administrative criteria

[5-point scale - 1 (least favourable) to 5 (most favourable)]

Criteria	Semi-nars etc.	Pro-gramme instru-ction	Lec-ture	Encoun-ter groups	Demon-stra-tive films	Beha-viour simu-lation	Case teach-ing	Field train-ing
1. Training uniformity	1	5	2	1	3	2	2	2
2. Time	2	5	3	1	2	2	2	3
3. Training expertise	4	5	4	1	3	2	2	3
4. Special material	5	1	5	5	4	2	2	5
5. Coverage of participants	2	5	3	1	3	2	2	2

While selecting the methods both criteria (learning and administrative) may be considered. Depending on the availability of various conditions, the most appropriate method and modality can be selected, and a few methods can be combined to give the appropriate modality.

Chapter Eight

ORGANIZING TRAINING

Effectiveness of training depends on how it is organized, how much attention is paid to the development of the training institution, and how the training institution functions, including the trainers as well as the group of trainees.

The need of consistency

An important aspect of the functioning of trainers and the training institution is the amount of consistency, consonance that can be brought about in the functioning of the training institution. The consistency will be amongst the various aspects. The participants are greatly influenced by consistency or consonance in the training institutions. This influences the total climate of training and learning. There are at least four areas in which such consonance seems to be important.

In the first place, there has to be consistency between training objectives and the physical aspects of training facilities. The physical environment of an institution indicates and generates some values. If the physical environment is inconsistent with the training objectives, the training objectives can not be fulfilled properly. For example, if the classrooms are designed in such a way that the rows of seats face the trainer chair, the climate of the classroom will be that of one-way communication. The physical setting of the classroom has to be different for a group to discuss and generate ideas; participants should face and should be able to interact with one another. Attention to such details is necessary.

Similarly the furniture in some training institutes is fixed and no change can be made in the physical lay-out of the room or the arrangement of the furniture. This may indicate lack of flexibility in the total climate. Attention may also be given to the design of the furniture. It may be useful to have a moduler design of furniture. A triangular table may be useful as the unit for such a moduler design. Such tables can be quickly assembled for small group meetings, or can be rearranged for a large face-to-face group, in a circular or oval shape, to discuss various matters. While designing the rooms, attention should be given to the designs of various facilities needed. It may be examined what objectives such physical setting will be able to serve.

In the second place, there has to be consistency between the training objectives and the management of the training institution. Much more is learnt by the participants from what they observe in the institution. If the objective is to teach them various principles of democratic administration and management, and if the training institute itself works as a highly bureaucratic organization, there will be no consistency in the training institute. Enough attention should be paid to the management of an institution. How are the various objectives determined? How people function? Do the trainers or groups of trainers have enough autonomy, or will they have to seek approval of everything they do from the main authority, i.e. head of the institute? Who arranges the various programmes? How are the problems solved, etc.? Such questions need to be properly looked into and seen whether they are consistent with type of training which is being given in the training institution.

For example, in the Indian Institute of Management, Ahmedabad, in India, enough attention was paid to the design of the rooms and furniture to create a sense of academic partnership. It was decided that the physical setting should indicate that there are no differences in the status of the faculty. The faculty may be designated differently (Assistant professors, Associate Professors and Professors), and they may draw different salaries, but as far as their academic performance is concerned no distinction should be made according to these levels of hierarchy. Accordingly, all the office rooms of the faculty members were kept of the same size, same pattern and the same basic furniture has been provided irrespective of the level of hierarchy at which the faculty is employed. The faculty members also do not use any designations; only names are written. Similarly, on the campus, no distinction has been made in the floor area or the type of the houses and physical facilities like the lawns provided in the houses. Only one type of houses is built for the faculty; even the Director's house is of the same type as the Assistant Professor's house. In spite of the several levels of faculty existing in the institute, these physical arrangements indicate a different atmosphere, and these are consistent with the type of training being attempted at the institute.

In the third place, there has to be consistency amongst the various trainers. It does not mean that all trainers would be alike. It only means that different messages given by different trainers do not conflict and that similar emotional messages are given. It also means that the trainers function as an effective team. The trainers in spite of their intellectual differences, or different ways of behaving, should project an image of respecting each other, tolerant of each others' points of view, and holding opinions without fear or without any vanity.

It may be useful for the trainers to examine from time to time what kind of messages they are giving as a total group to the participants. If there are differences and problems amongst the trainers, and if these are not processed or cleared by them as a group, the group of trainers may come out as an inconsistent and a divided group, and this is likely to vitiate the objectives of training. A good training institution develops mechanisms for trainers to spend some time in

examining such issues of relationship, of consistency and inconsistency reflected in their behaviour in the total group.

And lastly, the consistency has to be between trainer statements and trainer behaviour. If the trainers make statements of being always available, or caring for the participants, and if they are not available to the participants for discussion, there may be a great deal of conflict and this is easily communicated to the participants. The trainers may examine whether what they tell the participants and the statements they make to them are consistent with their behaviour.

The training climate

It is important to pay attention to the total climate of the training institution. The climate may either promote or it may come in the way of good learning.

There are several ways of studying and understanding the climate of a training institution. We are suggesting one approach — the motivational approach to study organizational climate. According to this approach, the institutional climate generates some motivation amongst the members of the institute (faculty and students). Living in a particular climate, they develop some psychological needs more, and these may become dominant and stronger. For example, an institute which has a climate of excellence, can make the need to excel (called achievement motivation) amongst the faculty and the students. We are suggesting that climate may develop the following six needs, the first three being positively, and the next three negatively, related to effectiveness:

1. Need for achievement, reflected in the concern people have for excellence, healthy competition for quality, and an urge to undertake creative work.
2. Need for power, reflected in the concern to influence others, develop expertise and use such expertise in decision making, and an urge to make impact on others.
3. Need for extension, reflected in the concern people have for each other, people and society in general, and an urge to become relevant, and make the institute and its work more relevant to the society.
4. Need for control, reflected in the concern for rules and regulations, and bringing uniformity and order, and an urge to have personal power over others through formation of influence groups (cliques).
5. Need for affiliation, reflected in the concern for establishing meaningful, personal relationship with others in the institute, and an urge to develop and keep a happy and well-knit "family" of the faculty and the participants.

6. Need for dependency, reflected in the concern for approval and mentorship, and establishment of a hierarchy of power, and an urge to refer matters to the "higher authority", and expectations that this be done.

Several dimensions of the working of a training institution contributes to the formation of the climate: what are the main goals and how these are set up, what are supervisory practices, how people deal with conflicts, mistakes, and risky decisions, how decisions are made, how they deal with innovation and change, and how people are rewarded.

We have given an instrument in Part C for measuring motivational climate of a training institute. It may be useful to look at the "climate profile", and the faculty group may like to discuss whether they are satisfied with this profile; if not, what kind of profile they would like to have. Then they can examine various items to see how a change in the 'climate profile' can be brought about.

Trainer values and behaviour

Trainer values and behaviour play an important role in influencing participants' values and behaviour. As we have said earlier, modelling has a great effect on the development of values, attitudes and behaviour of the participants. In addition to the modelling effect, trainer behaviour has been found to have an important role in influencing participants' learning and making them active and autonomous, or passive and dependent. A trainer influences the participants; his role is to influence. However, the influence may be in two ways, i.e. direct and indirect ways of influencing. Direct influence is that influence which restricts the freedom of the participants and makes them conform to what the teacher wants them to do. Charismatic leadership usually generates such influence. The participants are not free to experiment. Several behaviours of trainer have been found to contribute to such direct influence. Lecturing is one of them. When the trainer lectures he does not allow the participant to have any freedom to act on his own. Criticizing participants contributes to direct influence. Giving orders or telling the participants what to do, justifying one's own authority or the view point the trainer has taken, all these contribute to direct influence. Admonishment or criticism restricts and curtails the freedom of a participant, and he becomes more and more hesitant to take initiative. That is why all these behaviours are said to contribute to direct influences.

On the other hand, the following types of behaviour contribute to indirect influence, because they encourage the participants to take initiative, and increase their autonomy: praising or encouraging the participants to express their ideas and feelings, accepting the ideas and feelings of the participants and clarifying them, asking questions

which stimulate participants' thinking and decision making, helping the participants to speak or participate.

It has been shown by several researches done in several countries including some in the Asian region that use of direct influence makes the participants passive, less initiative-taking with low activity level, and with high dependence. On the other hand, indirect influence of the trainers helps the participants become more active, take initiative and use their judgements.

The trainer values also incluence the participants. The trainers need not have similar values. However, it is very important that the trainers are clear about their values and uphold their values. Some of the values relate to the behaviour of the trainer in the classroom or in the institution. These are reflected in the interaction teachers have with the participants. Trainer behaviour can be understood in terms of his training style. Transactional analysis can be used as one good framework for understanding the trainer style. We reproduce in the Part C a form which can be used by a trainer to find out his training style and behaviour. The use of the form has been explained.

Participation

The participants also should participate in the management of the training institution. Since the participants are a mature group it may be useful to take advantage of their presence. This may not only facilitate better administration of the training institute, but may also help the participants to learn several things usually taught in the classroom. Some areas may be identified where participants may share the administrative responsibility of the training institution, e.g. arrangement of food, running and general supervision of the canteen. Similarly while evaluating training or preparing some details about the syllabus etc., the participants may be given some responsibility. This should not be done as a ritual. However, it may be useful to see what the participants can share and how they can contribute to the effectiveness of the training institution.

Institution building

Increasingly more and more attention is being given to what is called institution building. Institution building is the process by which an institute is able to influence outside environment and is able to sustain its continuous growth. It develops self-renewing capabilities. This is possible if attention is given to the various processes through which self-renewal can be maintained. We suggest the following propositions for institution building. These propositions have implications for what can be done in relation the organization of training and training institutions.

Proposition 1: If the goals of an institution are perceived as important for the society, and these are seen as challenging, and further if these are shared among the members of the institution, the process of institution building will be smooth.

Proposition 2: If the goals are widely shared amongst the members of the institution and these are fairly focussed, the institution has good chances of success.

Proposition 3: If an institute identifies key, committed people in the beginning, before identifying the specific programmes or fields of action, it has a better chance of development.

Proposition 4: If enough trust is not put in people working in an institution, and they are not given enough autonomy to work, institution building will suffer.

Proposition 5: If enough attention is paid to the process in the beginning of the institution's life, less attention will be needed to it later, and enough time will be available to work on substantive aspects of the institutional work; on the other hand, if very little attention is given to the process in the early life of the institute, more time will be wasted in process matters.

Proposition 6: The matrix form of organization may be considered as most suitable for institution building.

Proposition 7: An institution which establishes necessary mechanisms to foster and stablize the tradition and culture is able to build itself in a better way.

Proposition 8: An institution which builds linkages with its major client systems has more chances of healthy growth.

Proposition 9: Sharing of common experience and developing some homogenity of thinking by the various members of an institute in its early life would help in the institution building process.

Proposition 10: Mechanisms of establishing a balance between autonomy of individual members and their collaboration for common goals help in the institution building process.

Proposition 11: A delicate balance between the autonomy of the institute and its strong linkages with and support from outside may help in the institution building process.

Proposition 12: The process of self-renewal throughout the life of the institution ensures institution building.

Proposition 13. If the leader is able to devote full attention and time for the institute, he will be able to contribute the maximum to its development.

Proposition 14: A non-competitive leader helps in the process of institution building.

Proposition 15: **The leader who respects the roles of members of the institute and provides autonomy to them to function contributes to effective institution building process.**

Proposition 16: **Institution building is facilitated if the leader of an institute establishes linkages and attends to the external affairs of the institute.**

Proposition 17: **A leader who is prepared to change and learn contributes a great deal to institution building process.**

Proposition 18: **The most crucial test of institution building is to what extent a leader is able to disposess the institute which he is able to build up.**

Action research

In organizing training attention may also be paid to research for improving training continuously. We are discussing some ideas in the chapter on evaluation. However, action research may be necessary to find answers to several significant questions, for making training effective. We reproduce below some questions which relate to various aspects of training done in earlier studies. In order to answer these questions action research may be used in which all those who are involved in such questions participate as partners.

General

1. What are the different uses of the word training? What are the implications of each for
   a) training practice,
   b) organizational development?
2. How can the costs of training be calculated accurately? Direct and indirect? Cost per session? Above all, cost of what result?
3. When is an organization ready for training? What are the characteristics of a client system likely to benefit most from training?
4. What happens to the participant by training? What is a useful model of a participant learning? For example:

His own expectations)
Training climate and norms) Acceptance (of what?) Trial Change
Trainer behaviour) Resistance (to what?)
Training group culture)

The pre-training phase

1. What are the ratios of people benefiting and not benefiting from training? It seems in general about 1/3 do not benefit at all, about 1/3 benefit much, about 1/3 benefit to a limited extent. How are these ratios in fact operating?

2. What are useful indicators of individual readiness for training? Which kind of training, when, and under what conditions? Do people ready for training have distinct clusters of personality characteristics? Expectations? Motivation? How can we measure these? How can we spot such people?
3. What are useful indicators of individual "unreadiness" for training?
4. How might trainers deal with those who are in the category of "not likely to benefit"? Any special pre-training work? Special work with them during the training period?
5. What can be done to "prepare" (pre-training work) participants for a training programme? Feedback on behaviour? Pre-training laboratories? Shifting responsibility for selection to participant, i.e. voluntary versus nominated participation?
6. What is the role of the participant's organization in pre-training work? Does the role vary accordingly to the type of organization?

Training strategies

1. Which strategies can be effectively combined? For what purposes? With what stresses?
2. What are the lead times for introducing specific strategies? What is the minimum concentration of skilled trainers, etc. for changes in strategy?

Establishing training needs

1. What methods are most effective for working out specification for which jobs?
2. How can training needs for an organizational change be assessed? By what methods, and how can we evaluate their effectiveness?

Training methods

1. Different methods and their effectiveness: Under what conditions are particular methods effective?
2. What training sequences are most effective for what purpose?
3. Research questions in each method: For example, what are the purposes and places of field experiences in training? Is field training effective when it is concentrated? Or phased? When?

Developing the programme

1. Programme mix: which sequences are most effective? Blocks? Parallel series?

2. How much flexibility is required in different prog mes? How can it be provided effectively and efficiently?
3. How can outside part-time resources be integrated in the programme?

Training group

1. Group composition: Within what ranges of age and experience can participants be effectively combined for training? For what purposes? What methods?
2. What are the cycles or phases in the development of a training group? How can the maturity of the training group measured? How enabled to develop at certain stages?

The trainer

1. What values in the trainer contribute to what kinds of behaviour in the participants?
2. What are the different roles of a trainer? What are the role congruencies? Role conflicts?
3. What different systems of expectations is a trainer expected to meet and how can he be helped to integrate these into his perception of his own role?
4. How are role conflicts resolved? Adequate and inadequate coping mechanisms for the resulting stress?

The post-training phase

1. How can the participant be helped to avoid or offset losses in transferring new learnings from the training to the work situation?
2. How can the training institution assess more accurately the effects of training on
   a) the participant and his growth,
   b) the use of new knowledge by the organization,
   c) the range and speed of changes of various kinds?
3. What are effective roles that the training institution can play to support changes produced by training in different kinds of organizations?
4. What are the various methods and their comparative effectiveness of involving the organization in post-training work?

The training institution

1. What are effective role mixes for trainers and how can the institution organize itself for their systematic performance?

2. What are effective specializations within the training institution? For example, administration and training? Training and services?
3. What contributes to a favourable climate for change in an institution? What are the advance indications of climatic change?
4. What are the phases in the life of an institution? The crises? Dilemmas? How are these generally resolved? Effective and ineffective behaviour? By whom?
5. What are effective ways of building and maintaining morale in training institutions?
6. What are effective institutional supports for action research? How can they be built into
   a) new
   b) existing situations?

Trainers in planning and management of education need to be given training in action research. Those who are involved more seriously in research may require more rigorous training in research methodology and techniques. We suggest (Figure 8.1) a brief 5-day outline for a workshop in action research for trainers in education management.

Figure 8.1

A 5-Day schedule of action research workshop

Day	Forenoon 9-12	Afternon 2-4
1.	1. Microlab	1. Lecturatte "Action research to improve education practices, especially those related to management".
	2. Introduction to the workshop.	2. Small group discussion.
	3. Lecture - demonstration: "Improving educational administrative practices".	3. Panel interrogates lecturer.
		4. Statement: Seven problems to be worked out, and formation of small group working groups.
		5. Lecturatte: "Getting and receiving help".

Figure 8.1 (Cont'd)

Day	Forenoon 9-12	Afternoon 2-4
2.	1. Lecturatte:"Defining the problem".	1. Lecturatte: "Getting evidence of change".
	2. Demonstration in defining the problem.	2. Small group discussion of the lecturatte, with representatives interrogating the lecturer.
	3. Lecturatte: "Criteria of sharpening and specifying a problem".	3. Practice-laboratory to prepare evidence use of instruments.
	4. Small group work on problem definition and analysis.	4. Small group work on problem diagnosis.
	5. General session to give further consideration to the main points met in defining the focus.	5. Reporting in general session.
3.	1. Lecturatte: "the action hypothesis"	1. Lecturatte: "Designing the experiment".
	2. Demonstration of help giving in hypothesis.	2. Practice session on constructing an attitude scale.
	3. Lecturatte: "Criteria for workable hypothesis".	3. Discussion in the general session on problems faced in attitude assessment.
	4. Small group on action research plans.	
4.	1. Lecturette: "Measuring overt behaviour".	1. Lecturatte: "Designing the experiment".
	2. Demonstration-cum-practice on measuring.	2. Individual work on finalizing the plans.
	3. Small group work.	
5.	1. Each participant presents his research plan and gets comments from other members of the workshop.	1. Overall workshop evaluation.
		2. Arrangements for follow up.
		3. Closing.

Managing the programmes

The following points may be kept in mind in managing training programmes.

1. Organize facilities for basic needs of the participants during the training programme so that they may be able to fully use their energy for learning. The participants should not waste their time while waiting for bath, food, water, laundry or finding out a typist to type their material, making return reservations, booking sightseeing trips etc. The training institution or the training co-ordinator should make such arrangements or a programme secretary may be appointed to look after such facilities and should be available to the participants all the time.

2. It is advisable to send as much information as possible to the participants in advance. The participants should know the objectives, course content, faculty and background, class trainings, the amount of work expected to be done by the participants, the material they should bring while coming to the training, how to get to the place of the programme, travel arrangements they should make, recreational facilities available at the sight of training, medical facilities etc.

3. If the participants should come prepared to the training the necessary background material should be sent well in advance. Most participants do not do any advance reading. Generally while working, they are quite busy with administrative matters. However, a few participants do take pains to prepare themselves for the training so while one may not have too high expectations it could be attempted.

4. Some free time and opportunities should be provided during a training programme for participants to interact with the other faculty of the training institution, to see other interesting or innovative programme in neighbouring places, and for some relaxation. Some times pushing too much information in a short period of time may develop negative learning attitudes.

5. A mid-course review and a terminal review help in improving quality from time to time.

6. During the training programme the co-ordinator should interact with the participants and take care of their problems.

Check list of institutional managerial tasks

General

- Prepare annual plan of training programmes.
- Prepare a calender of programmes for the year.
- Print the calender.
- Mail it to all potential clients.
- Ensure the availability of facilities.
- Ensure the availability of classrooms.

- Get the audiovisual equipment ready.
- Recruit support staff.
- Ensure capacity to produce all teaching materials.

Specific to the programme

- Prepare a programme budget.
- Preparation of programme announcement.
- Mail brochure to potential agencies for sponsoring.
- Finalize programme schedule.
- Get all teaching materials, background papers ready.
- Finalize acceptance of nominations.
- Mail acceptance, schedule and instructions to reach the spot, etc.
- Separate library books for this programme.
- Prepare accommodation.
- Make sure that secretarial help is available.
- Get classroom ready.
- Get all audiovisual materials required ready including operators of machines, etc.
- Finalize inaugural programme.
- Finalize arrangements for field trips.
- Finalize guest faculty and inform them.
- Finalize classroom arrangements.
- Arrange transport to pick up participants or make arrangements to instruct them.
- Supervise accomodation and food facilities.
- Explain administrative arrangements to participants.
- Help them for return arrangements.
- Meet participants informally to find out their problems.
- Arrange accommodation for guest faculty.
- Arrange honoraria for guest faculty.
- Arrange social get togethers and sightseeing.
- Prepare an evaluation form.
- Get the course reviewed in the middle and at the end.
- Plan follow-up work.
- Conduct follow-up evaluation.
- Use feedback for designing new programmes.

Chapter Nine

EVALUATING TRAINING

Every one concerned with training is interested in evaluation of specific training programmes. But most of the attempts made in evaluation are not satisfactory. This is a critical and difficult area. The following are the relevant questions in this connection.

Why should we evaluate training?

For whom should training be evaluated?

What should be evaluated in training?

How should training be evaluated?

Answers to these questions will help to plan evaluation more systematically.

Why evaluate training?

People involved in training want to know whether training has fulfilled the objectives for which it was organized. The following purposes are served by evaluation.

1. Feedback on effectiveness. There is a legitimate and genuine interest to know if training has been effective. Those who invest resources in training (the government or other agencies) want to know if the expenditure has been worthwhile; those who invest effort in training (the trainers) are genuinely concerned whether their efforts produced the desired changes; those who receive training (participants) are equally interested in knowing whether training helped them.

2. Feedback for improvement. The immediate use of such feedback from evaluation can be in improving certain aspects - improvement in training methodology by the trainers, training organization by the institutes, and specific areas of learning by the participants.

3. Feedback for action. The feedback from evaluation should also help the respective groups or individuals to use it for appropriate action. For example, evaluation may indicate what the work organization should have done (and in future can do) to make training more effective - both pre-training and post-training action. Similarly, the feedback may have implications of action by the training institution.

4. Feedback for better control. The most effective use of feedback from evaluation may be to provide overall control on training as an instrument of change - the overall planning of training. Evaluation may help in making necessary adjustments to make training more effective.

Evaluation for whom?

There are several partners in the training act and process, and all of them are the clients of evaluation. Their needs for feedback and use of feedback for improvement (control) will naturally be different with some overlapping. There are four main partners in training (and clients for evaluation):

1. The participants or learners.
2. The training organization or institute, including
   a) Curriculum planners
   b) Programme designers
   c) Programme managers
3. The faculty or facilitators or trainers
4. The client organization, the ultimate user and financier of training.

What to evaluate?

The following dimensions are worth mentioning for evaluation of training:

1. Context (factor not directly related to training, but significant ones affecting its effectiveness. For example, board and lodging arrangements).
2. Inputs (what is contained in the training - the curriculum, the contents).
3. Outputs (the result of training in terms of better understanding, change of behaviour, or improvement of practices in the organization).
4. Process In all discussions of training evaluation the most neglected aspect has been the training process which can not be covered by training inputs. The climate of the training organization, the relationship between participants and trainers, the general attitudes and approaches of the trainers, trainees, training methods, etc., are very important aspects determining the effectiveness of training. Evaluation of training process, therefore, should constitute an important element. We may thus have four main dimensions of evaluation: evaluation of contextual factors, evaluation of training inputs, evaluation of training process, and evaluation of training outcomes.

Many have suggested the first three dimensions (context, inputs, and outputs) and no one has mentioned the fourth one, viz., the process. However, some authors have instead suggested 'reaction' as another dimension (the way people react to training - like or dislike it). This dimension (reaction) is not in the same category as the other three. Reaction evaluation (liking or disliking can be of all of them: contextual factors, training inputs or training outputs.

The various areas of training evaluation need more attention and elaboration. Without these evaluation will be narrow. Attention has not been given to these in the literature. Seven main areas, with some sub-areas under each, are suggested for consideration. These are shown below in sequential order. Figure 9.1 shows the conceptual model of training, by relating the areas to the dimentions.

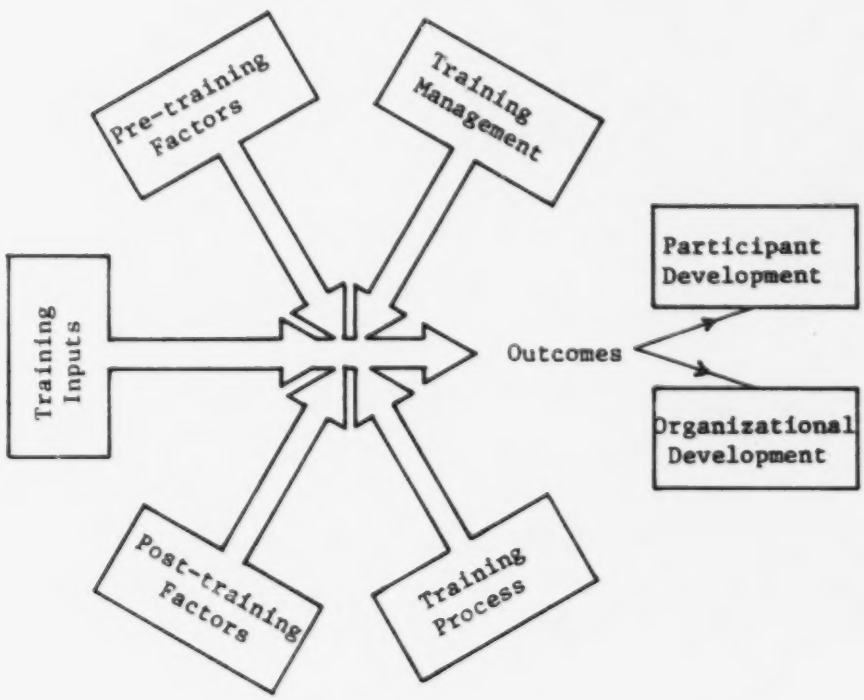
Coverage of Evaluation

Areas of evaluation	Dimension
1. Pre-training factors.	Context
a) Preparation.	
b) Learning motivation.	
c) Expectations.	
2. Training events.	Input
a) Curriculum including strategy (sequencing).	
b) Specific events.	
c) Specific sessions.	
3. Training management.	Context
a) Areas of satisfaction/dissatisfaction.	
b) Training facilities.	
c) Other facilities.	
4. Training process.	Process
a) Learning climate.	
b) Training methods (pedagogy).	
c) Trainer team effectiveness.	
5. Participant development.	Outcome
a) Conceptual development.	
b) Learning of skills.	
c) Change in values/attitudes.	

Areas of evaluation.	Dimension
d) Change in behaviour.	
e) Application.	
6. Organizational development.	Outcome
a) Job effectiveness.	
b) Team effectiveness.	
c) Organizational effectiveness.	
7. Post-training factors.	Context
a) Cost.	
b) Organizational support.	
c) Organizational factors hindering or facilitating use of training.	

Figure 9.1

A Conceptual Model of Training



1. Effectiveness of training depends on the synchronic relationship and collaborative working amongst the four major partners of training (participants, training organization, trainers, and client organization). Hence evaluation should provide necessary feedback to all of these for contributing to training effectiveness.

2. Training effectiveness depends not only on what happens during training, but also on what happens before the actual training pre-training factors) and what happens after the training has formally ended (post-training factors). Evaluation can not neglect those important contextual factors (see chapter four).

3. Various aspects of the training process which are not direct training inputs contribute to its effectiveness. Evaluation should, therefore, also focus on these factors.

4. The focus or the main task of evaluation should not only be in the nature of auditing (measuring training outcomes in terms of what has been achieved how much), but should also be diagnostic (why has the effectiveness been low or high), and remedial (how can effectiveness be raised).

How to evaluate?

The question of how to evaluate training involves two aspects - the overall design of evaluation, and the specific techniques to use in evaluating training.

1. Design of evaluation:

The overall design of evaluation helps in planning the evaluation strategy in advance. Evaluation designs can be classified in various ways. Two important dimensions, however, are the time when evaluation is done (or data are collected), and the group or groups involved in evaluation (or data collection). Data on relevant aspects may be collected only once after the training is over, or on two (or several occasions) before training interventions, and later, after the training is over. On the other hand, only one or more groups which undergo training may be involved in evaluation. These give us four basic designs of evaluation.

Longitudinal design is one in which data are collected from the same group over a length of time, usually on several occasions but at least twice, i.e. before and after training. In the latter case it is called "before-after" design. In ex-post facto design, data are collected from the group which has been exposed to training only after the training is over. Obviously, this design has inherent limitations in drawing conclusions from evaluation. But in many practical situations this is a reality, and it is a challenge for evaluation designers to devise ways of extracting the most in such a design. Comparative survey design may involve collection of data from many other groups, in addition to the group exposed to training. In this design also there is no control and there are limitations in drawing conclusions.

The design with a great deal of control and sophistication is the matched group design. Several variations of this design can be used. Another group, matched on some significant dimensions with the group being exposed to training, can be identified, and data can be collected from both, once (ex-post facto) or several times (longitudinal). Or, matched sampling can be selected for a comparative or cross-sectional survey. The design can be made very sophisticated with several matched groups (one with training "treatment", another with a different type of treatment, and the third with no treatment, combined with ex-post facto and longitudinal designs, and making it a "blind" study - investigators not knowing which group is of what category). Both experimental and quasi-experimental designs can be used.

2. Evaluation techniques:

Evaluation techniques can be classified in various ways. One way may be to classify them into response (reactive) techniques and unobtrusive measures or secondary source data techniques. Techniques requiring some kind of response produce some reaction in those who are responding. The very act of asking people questions (orally or in a written form) may produce change. Since they produce reactions these are also called reactive techniques. Other techniques can be called "unobtrusive". These make use of available data or secondary source data. All indicators, indexes, etc., are such measures. For example, to measure whether general morale has improved in a unit, it may be more useful to use secondary source data like examining figures of absenteeism rather than asking questions.

Similarly, an unobtrusive measure of interrole linkage may be to increase the number of voluntary meetings to solve common problems. In fact, unobtrusive measures or secondary source data may be much more creative and imaginative and need to be discovered and used more often for evaluation. However, if some data are collected about individuals' behaviour without their knowledge and approval, this may be unethical. But this applies as much to responsive techniques as to unobtrusive ones. Another non-reactive technique, a very old one, is that of observation. Observation can also become a reactive technique if persons being observed know that they are being observed.

Evaluation techniques usually collect data from participants, and these are, therefore, called response or reaction techniques. The methods of data collection may include interview, written reactions (questionnaires, scales, open-ended forms), and projective techniques. One additional method in this category worth mentioning is group discussion by a small group consisting of individuals having experienced and with enough knowledge about it may give better evaluation results than figures calculated from routine responses.

The greatest contribution to the development of evaluation techniques has been made by advances in scaling techniques. Techinques based on well prepared instruments to measure various dimensions are being increasingly used. Various methods of scaling can be used to

develop effective evaluation techniques. The three well known scaling techniques (associated with Thurstone, Likert and Guttman) can be imaginatively used in preparing new evaluation tools. More recent developments have opened new vistas for sophistication in evaluation work.

Hamblin[1] has done an excellent job in discussing the studies in training evaluation to illustrate the techniques used. At the end of the book, Hamblin has summarized the various techniques discussed under his five-level model. These are:

Reaction: Session reaction scales, reactions notebooks and participation, observers' records, studies of inter-trainee relationships, end-of-course reaction form, post-reactions questionnaires and interviews, and expectations evaluation.

Learning: Pre-course questionnaires to instructors, programmed instruction, objective tests, essay-type written or oral examinations, assessment by trainees of knowledge changes, skills analysis and task analysis, standardized tests of skill, tailor-made techniques for evaluating skill, assessment by trainees of skill changes, standardized attitude questionnaires, tailor-made attitude questionnaires, semantic differential scales, and group feedback analysis.

Job behaviour: Activity sampling, SISCO and Wirdenius techniques, observer diaries, self-diaries with interviews and questionnaires, appraisal and self-appraisal, critical incident technique, observation of specific incidents, depth interviews and questionnaires, open-ended depth techniques, and prescription for involving management in the training process.

Organization: Indexes of productivity, labour turnover, etc., studies of organizational climate, use of job behavioural objectives to study behaviour of non-trainees, and work flow studies.

Ultimate value: Cost-benefit analysis or human resources accounting. Schmuck and Runkel[2] have discussed in detail various dimensions of evaluating outcome, including techniques used for evaluating three levels of outcomes. They have reproduced some questionnaires used for evaluating organizational functioning, learning environment, job satisfaction, need satisfaction, and organizational adaptability (problem solving, access to resources, responsiveness). They stress the use of directly observable evidence for evaluation of such outcome and have given examples from some studies.

---

1. A.C. Hamblin: *"Evaluation of Training Programmes"* American Society for Training and Development, 1975.

2. R.A. Schmuck and P.J. Runkel, *"Handbook of organization development in schools*, University of Oregon, 1978.

While evaluating training, the purpose and the clientele of evaluation may first be clarified. Ordinarily a training institute may undertake reaction or response evaluation of the contextual factors of every training programme. When a programme has been conducted for a long period of time, a thorough evaluation may be undertaken to answer several questions, from pre-training work to post-training support and utilization. Such evaluation studies need to be well planned. The computers can help in answering such questions from cumulative evaluation data: who gains from training? What helps in better utilization of learning from training programmes? In what combinations should participants be sent for training? What sequence is more effective? What needs to be done to make better utilization of training on the job?

A brief outline of design of evaluating training programmes for supervisors is given as one of the illustrations in the appendix to this chapter, 9.1. In the same appendix a form to collect critical incidents is suggested, and two forms are given as illustrations of structured evaluation.

Evaluating training programmes: a case from Malaysia[3]

The evaluation methodology followed in Malaysia to evaluate and experimental training programme for school principals provides another good example of systematic evaluation of training.

During early 1980 the Institute Latihan Pegwai Pelayaran Malaysia (MESTI) organized a 27 days training programme for principals of schools. The programme was designed on the basis of a survey of training needs of 60 school principals. A total of 46 trainers were involved in developing the course content covering six competancy areas (Educational foundation, school management and leadership, pedagogical leadership, administration of education system, school office management and financial management). The course was attended by 30 primary and 30 secondary school principals.

The evaluation of this course was conceptualized as the process of delineating, obtaining and applying descriptive and judgemental information concerning the merit of the training courses goals, plans, activities and results for the purposes of decision making and some degree of accountability. The evaluation aimed at catering to the needs of various agencies including the training institutions, course developers, programme implementers, trainees, professionals in other divisions and funding agencies. The areas of evaluation included: soundness of the design, adequacy of programme materials, implementation, attainment of course outcomes, and applicability of skills acquired to on-the-job effectiveness. For each of these areas a number of questions have been listed that point out to the indicators of effectiveness of the training in that area. For example, in the area of implementation

3. Evaluation Report No. GBAII-80, Institute Latihan Pegwai Pelayaran, Malaysia, 1980.

of training the following indicators of effective implementation were listed: conducting the training according to schedule, conducting it as planned, co-operativeness of trainees, their motivation, adequacy of resources and facilities, extent of administrative problems, appropriateness of background of trainees, competence of programme planners and administrators.

Based on these indicators (called as judgemental criteria by the evaluators) a set of questions called as 'criterion questions' were formulated. Based on these questions a measurement plan was drawn. The measurement plan indicated the measurement procedures. A part of the measurement plan for the area of 'implementation of the training programme' is presented below. (See pp. 131-132)

Detailed instruments were developed as indicated in the evaluation plan for each aspect. The detailed instruments are available in the detailed technical report of the project from MESTI.

The evaluation methodology used in this case provides an excellent illustration of the extent and depth to which training processes and outcomes could be analysed. Such an in-depth evaluation of training programmes is likely to help any training institution in improving the quality of its own programmes as well as benefit future trainees. The results of this evaluation report of the 27-day programme runs into several pages unlike the general evaluation reports one comes across which do not reveal much beyond a favourable assessment of the programme. This evaluation report reconstructs the whole programme and provides several insights for policy makers, trainers, and trainees to improve the quality of training. For example, on one of the criterion questions (EQ3d in the evaluation plan mentioned above) the following information and judgements were obtained after an analysis of data obtained through the instruments used as suggested in the plan.

Measurement Plan for Evaluation Question EQ3

How well was the training carried out?

Criterion Questions	Measurements Procedures					Instruments
	How	When	By whom	Information Source	Data Analysis	
Are scheduled activities and events implemented on time?	The progress of the training will be checked against the official timetable.	Beginning and end of of each session.	Evaluator	Activities and events of training.	Comparison	Official timetable.
Is training carried out as planned?	Activities as they occur will be checked against the official timetable.	During each session.	Evaluator	Activities and events of training.	Comparison	Official timetable.
To what extent are trainees co-operative, motivated, and satisfied with the training?	All training sessions will be observed.	During each session.	Evaluator	Trainees' behaviour.	Frequency	
	MESTI trainers will rate trainees' initiative and effort.	During group work.	MESTI trainers	Trainees' behaviour.	Means, variance.	Trainer session questionnaire(Tr1)
	Trainees will use rating scales to indicate their feeling about each session	End of each session.	Evaluator	Trainees' feelings.	Medians	Trainee session questionnaire(Tn1)
	Incidents, complaints and grievances will be recorded.	During the course.	Evaluator	Incidents, complaints, grievances.	Frequency	Evaluator Observation Sheet (E0)
	Trainees' suggestions for the improvement of the course will be collected.	End of each session.	Evaluator	Trainees' perceptions.	Frequency	Trainee Session Questionnaire(Tn1)
Are available recources and facilities adequate and used?	On-course observation.	During training.	Evaluator	Resources, facilities.	Frequency	Evaluator Obs. Sheet

Criterion Questions	Measurements Procedures					Instruments
	How	When	By whom	Information source	Data Analysis	
	Trainers and trainees will use rating scales.	During training	Trainers Trainees	Trainer and trainee percentions.	Frequency	(Tr1) & (Tn1)
Are administration problems small and under control?	Training sessions will be observed, incients will be recorded.	During the course.	Evaluator	Incidents, events.	Frequency	Evaluator Obs. Sheet. (Tr1)
	Trainers will record what they have observed.	During training	MESTI trainers	Incidents, events.	Frequency	Trainers Session Questionnaire(Tr1)
	Trainees will record what they have observed.	End of each session.	Trainees	Trainee Perceptions	Frequency	Trainee Session Questionnaire(Tn1)
Do trainers seem to know their subject matter and have expertise as trainers?	All training sessions will be observed.	During each session.	Evaluator	Trainers	Ratings	Evaluator Obs. Sheet. (Tr1)
	Trainees will use rating scales.	End of each session.	Trainees	Trainers	Median	Trainee Session Questionnaire(Tn1)
Are products of training sessions produced as scheduled?	Trainers will make records	During group sessions.	Trainers	Products of training.	Product Status.	Trainer Session Questionnaire(Tr1)
Do course administrators seem competent in managing the course and handling of unforeseen events.	Specific complaints will be noted.	During the course.	Evaluator Trainers	Complaints	Frequency	(E0) & (Tr1)
	MESTI administration will be rated by trainees.	End of each session	Trainees	MESTI administration.	Median	(Tn1)
Are the delivery methods used the most suitable for the particular topic or content area?	The appropriateness of the delivery method used will be rated by trainees. (Alternatively, trainees will record for each topic the delivery method that would be more appropriate)	End of each session.	Trainees	Delivery methods.	Median	(Tn1)

EQ3d Criterion question

Are available resources and facilities adequate and used?

Information

The overhead projector was fully used. However, trainees sitting toward the back could not see fairly well, especially the writings.

The microphone was also fully used. For most trainers the microphone was necessary not to make hearing difficult for the trainees. However, several trainers had the tendency to move about in front of the blackboard while they explained about something. For these trainers, the fixed microphone was not suitable as their voice level went up and down.

Only one trainer handed out both Bahasa Malaysia and English versions of his handouts. This may be expensive but desirable for the benefit of those trainees who comprehend better unfamiliar readings in English.

White chalk on the blackboard could not be clearly seen from the back of the class. The illumination on the blackboard was too low.

The main lecture room was suitable for the purpose although perhaps a little too narrow. The space used for small group work was not so suitable because trainees' voices from one group disturbed others in another group.

Lighting was sufficient except for the blackboard surface. The rooms were air-conditioned.

A secretariat provided efficient support services throughout the course.

Board and lodging for trainees were looked after. No major problems were encountered.

Judgement

It can be said that the available resources and facilities at the Fakulti Pendidikan, Universiti Malaya as well as those brought along from MESTI's office were fairly adequate and fully used.

Appendix 9.1

INSTRUMENTS FOR EVALUATION

In this section a few illustrative evaluation instruments are given. A design of evaluation is suggested, followed by a form for collecting critical incidents and two structured forms, one of which can be used in field training.

A. Design of evaluating supervisors training programme

It may be useful to do a thorough evaluation of a training programme after it has been conducted for at least five times. Such evaluation may help in giving information about whether the programme was effective in achieving the goals for which it was designed, why it was effective for some goals, and why not for other goals, what did the work organization do or not do to make the training effective.

The following steps may be involved in designing an evaluation study for the above purposes:

1. Clearly spell out the objectives or goals of the training programme. There may be at least two-level goals - first level goals are concerned with producing change in the participants (better knowledge, higher skills, more favourable attitudes, greater motivation, etc.), and the second level goals are concerned with the ultimate improvement in the supervisory behaviour (more supportive role with headmasters, providing more facilities, listening more carefully to their problems, delegating more work to junior people or persons working in the field, use of other human resources like the schools and communities, etc.). These goals may be made as specific as possible.

2. Develop indicators of the goals or objectives in the individual's behaviour, as well as in the organization. Developing such indicators is very important. For example, if one objective of the programme is change of attitude toward supervision (regarding supervision primarily as a develop-mental rather than a regulatory function), one indicator of this change may be the mention of development-oriented items in the supervision report vs. regulatory items; another indicator may be time spent by a supervisor on the different dimensions (development vs. regulation).

3. Prepare a sample of supervisors who have undergone training.
4. Prepare a sample of headmasters, teachers, and members of the village communities to get their reactions to changes in the supervisory practices of late.
5. Prepare a sample of officers in the department of education with whom the supervisors come in contact.
6. Prepare instruments to get opinions of people "if emphasis and time spent on some aspects have increased (a great deal, somewhat or not at all) or decreased (similar 3-point scale). These items may, for example, cover: guidance to headmasters, understanding headmasters' difficulties, solving problems of the schools, providing the needed support, facilitating relationship of the schools with other agencies, encouraging innovations, rewarding excellence, finding faults, criticizing headmasters and teachers for lapses, checking teaching, checking registers and other documents, inspecting the building, etc.
7. Get critical incidents in the change of behaviour of the supervisors after training, from several sources: some officers of the department, some headmasters, some teachers and some representatives of the community. The form of collecting critical incidents is separately suggested.
8. Prepare an instrument for the supervisors who completed training to find out what (and how much) they found useful in the training, what were not (and should have been) included in training, what they were able to implement (and why) and what they could not use (and why not).
9. Get critical incidents from the trained supervisors on how they worked differently after training (one highly satisfying and one highly dissatisfying experience).
10. Analyse the data from the various instruments, and prepare a report. If facilities are available, compute correlation between benefit from training and several background variables (age, number of years in service, position, etc.) to find out who benefit most from such training.

B. Critical incidents of behaviour change

Changes in behaviour, attitudes, or practices by participants, as a result of some training, can be evaluated by collecting critical incidents. A critical incident is a significant event to indicate how a specific dimension is perceived. Suppose that we are interested in knowing if the supervisors trained in a programme became more effective after training. We may like to collect some critical incidents from some representative memebers of their role set (their senior officers, colleagues, headmasters, teachers, member of the community, etc.), and some supervisors also. The form of the critical accident will be something like the following.

We are interested in knowing if there has been any change in the attitude or behaviour of _____, the Educational Supervisor, in recent months (i.e. after _____). Please think of a change you have noticed. Describe an actual incident in which this change is reflected. Please write down what the situation was, who were involved, what happened, what the supervisor did, with what consequences. At the end write down your own opinion about the change. The incident may be a minor one (e.g. his behaviour with you), but it should be critical, i.e. it should indicate clearly the type of change you have noticed. We are interested in evaluating the effect of training, and not the supervisor. Your reply will be very valuable, and will be kept and treated as strictly confidential.

C. Post-session evaluation form

To be filled in by the participants after each session. Strike off the questions not applicable to you.

Programme:_____ Instructor:_____

Title of the session:_____ Date:_____

1. How much clear are you about the objectives of the session?

   _____ very much
   _____ somewhat
   _____ not much
   _____ not at all

2. Did you know in advance what preparations were required for the session?

   _____ yes
   _____ no

3. Did you prepare for the class as required?

   _____ yes, fully
   _____ yes, somewhat
   _____ no

4. Rate the session on the following dimensions (check one of the alternatives for each).

   a) Appropriateness of the teaching method used for this topic

   _____ very appropriate
   _____ somewhat appropriate
   _____ better methods should be searched

   b) Adequacy of the time allotted for the topic

   _____ very inadequate
   _____ somewhat adequate
   _____ adequate
   _____ more than adequate

c) Style of the teacher

_____ non-directive but authentic
_____ non-directive and had no control over class
_____ directive and discouraging participation
_____ tended to be directive
_____ (any other)

d) Scope given for participants to learn (encouragement, etc.).

_____ enough opportunity was given and efforts were made by trainer.
_____ some opportunity was given
_____ not sufficient opportunity was given

e) Manner of presentation sequencing

_____ very systematic
_____ somewhat systematic
_____ not so systematic

f) Communication of teacher

_____ very clear
_____ somewhat clear
_____ not so clear

g) summarising

_____ discussions were summarised at the end
_____ not summarised

4. Give below any of your suggestions for improvement of the quality of this session.

Part C

TRAINING MODALITIES AND METHODS

This part presents in some details several methods useful for training of education managers. Generally, trainers rely heavily on the lecture method. The lecture method has serious limitations for development of skills, orientation and attitudes. Recent advance in management pedagogy has made the choice much wider. In this part, nine training methods or modalities have been presented in some details: self-instructional methods, simulation exercises and games, inbasket exercises, case method, role playing, field training, self study and small group work, instrumented training, and distance training.

The discussion on each of these modalities or methods has highlighted the concept behind the method followed by a detailed description of the modality, and an evaluation of its appropriateness for developing different education management skills. Wherever possible examples of the method have been provided. More attention has been paid to those techniques that are less known for training in education management. Techniques like simulation exercises and games, case method, in-basket exercises, role plays, small group work, instrumented feedback and distance training have great training potential for education management. More examples have been given while discussing these techniques. Distance training has been given more space because of its potentiality for quicker and wider coverage of education managers, and its vital role as an excellent modality of continuing education.

At the end of the Handbook a few references and a select bibliography have been given. Interested training institutions can use this information in establishing mutual contacts with people with similar interests.

Chapter Ten

SELF-INSTRUCTIONAL MATERIAL

Self instructional material is specially written for individuals to learn by themselves, without any assistance from another person. Generally programmed learning materials are considered as self-instructional material. In the context of educational administration programmed material prepared on scientific principles of programming may have some limitations. It may be therefore more appropriate to use the term "self-instructional material" rather than "programmed learning". Self-instructional material may take several forms. All such material have some common characteristics. The following are some of the characteristics of self-instructional material.

1. The reading material are presented in smaller units to enable the learner to understand concepts or acquire information step by step.
2. After every presentation of a meaningful unit of information or development of a concept an opportunity is provided to the learner to get feedback on his understanding or learning. Proceeding to the next step depends on his learning the present one.
3. Since users of self-instructional material do not have an opportunity to interact with a trainer and have to depend entirely on what is given to them, a good deal of time and effort is spent on the preparation of these material. The material are prepared according to the principles of programmed instruction and they are tested before final release of the material.
4. Since self-instructional material depend entirely on the learner's motivation to learn, the learner has the freedom to work at his own pace.
5. Like in all forms of reading material the learner has to be active. At every step he needs to give responses to test himself and his learning.
6. In self-instructional material the assumptions about the entry behaviour and objectives of the material in the form of terminal behaviour are explicitly stated in the beginning.

Forms of self-instructional material

Self-instructional material may be distinguished under two categories: programmed learning material, and other forms of material.

Programmed learning material: Programmed learning material are based on the following principles.

1. Graduated small steps. The learner learns better and faster if information is presented in small steps, slowly increasing in difficulty and complexity.
2. Active involvement. Learning occurs better when the learner is actively involved in the learning situation.
3. Feedback. Learning is facilitated if the learner gets feedback at every step of his learning and his knowledge about his progress.
4. Individualized learning. Since individuals differ in relation to their background, interest and orientations learning occurs more when each individual can learn at his own pace.

Forms of programmed learning: In writing programmed learning different forms may be used. Two standard forms that are commonly used are: Linear style and Branching style. The main difference between the two is in the presentation of content matter and testing comprehension. A few popular methods of programmed instruction material are mentioned below.

In Pressey's method the information is presented in small steps. After every step the comprehension is tested by a multiple choice question. If the learner identifies correct answer he goes to the next step for more information. If he makes a mistake he is referred back to read and understand the material.

In Skinner's method an attempt is made to present the information in such a way that the learner makes very few mistakes. In order to reduce mistakes the information is presented in very small steps called frames and the learner is provided with clues or prompts intended to help him make the correct response. The response has to be given by the student in the form of filling the blank or solving a problem. At every step he gets feedback on the correctness of his response before he proceeds to the next frame.

Crowder's style allows errors and remedial instruction. It is called as branching style. In this style information is presented sometimes in paragraphs rather than small frames. Such presentation is followed by a multiple choice questions. If he makes the correct choice he goes to the next step. If he makes wrong choice he is referred back to some more clarifications through remedial passages.

Programmed learning material may also be presented audio-visually. When an auditory modality is chosen the information in small steps, frames or passages are taped on tapes. The tape recorded material may have a supplementary manual or answer sheets for use by learner. The

learner may keep on responding. Similarly programmed films or teaching machines could be used. An advantage of the audio-visual material is the variety it offers. Sometimes stimulation of auditory series may have higher pay off. A sample module of programmed learning material is given in Appendix 10.1.

Other forms of self-instructional material

Other forms of self-instructional material use one or more principles of programmed learning. Books may be written specially as self-instructional material. Self-instructional books differ from other books on the following criteria:

a) The books or material are written specially for self-learning without the need for an instructor.

b) The material are presented in a simplified form, moving from simple concepts or information to complex ones.

c) The material provide some exercises and self-tests periodically to help the learner to test himself and get feedback on his learning. Such exercises may provide an opportunity to the learner to apply the concepts he learns to new situations. Answers to the exercises and self-tests are also given.

Applications for training education managers

Self-instructional material are useful particularly under the following conditions:

a) When the subject matter to be covered is technical or informational in nature;

b) When the knowledge or skills of the target group of trainees is very heterogeneous and they are to be brought to a uniform level before they are called for an advanced training programme;

c) When there are too many people to be covered by the training programme and it is not feasible to train them. For example, in most Asian countries, having thousands of headmasters in various parts of the country, it may not be feasible to train all of them in face-to-face programmes. It may be useful to use self-instructional material on topics like financial management, institutional planning etc.

The series of seven books developed by Unesco for educational planners is a good example of this.

Designing self-instructional material

Preparation of self-instructional material is a time consuming process. It requires good knowledge of the subject matter and skills of developing programmed instruction. Development of programmed instruction requires specialized skills. In some countries special courses of

three to six months duration are being conducted to train programme writers. However, such skills can be developed in courses of shorter periods. The following steps are involved in preparing self-instructional material.

1. Select the subject on which self-instructions need to be prepared e.g. long range planning, school accountancy systems, supervision, cost-benefit analysis, student flow estimates etc.
2. Explicitly state the assumptions about the learner who is likely to use the material. This statement is in the form of entry behaviour. It should specify the knowledge, attitudes, skills etc., the learner possesses before going through the material.
3. State the objectives of the material in the form of terminal behaviour. Such objectives should indicate what the learner would be doing after completing the programme, under what conditions he would be doing and what are the minimum acceptable levels of performance.
4. Search the content matter that would go into the self-instructional material to develop the terminal behaviour in the learner. If no content matter is available it should be written or at least a broad outline should be developed, indicating what concepts and information the learner should get.
5. Decide the programming strategy, i.e. the style of programming (linear, branching, passage-type, not strictly programmed-instruction based etc.).
6. Arrange the subject matter in a sequence, starting from simple to complex. Some material may need to be covered before the others.
7. Construct frames, passages or units of presentation of the content or items. These follow the programming style. If linear programming is used and Skinner's style is followed, small units of information should be presented giving opportunity for the learner to test himself at every level. Difficulty level should be graduated for the frames and prompts should be provided.
8. Construct at the end of each meaningful unit of subject matter, criterion tests or unit tests to help the learner test himself and get feedback on his learning.
9. Test the material individually or in small groups on a small sample of subjects. Observe their response patterns, difficulties and take their comments.
10. Evaluate and revise the self-instructional material.

Appendix 10.1

A SAMPLE MODULE OF PROGRAMMED LEARNING MATERIAL[1]

Topic: Principles of group behaviour

For whom: Teachers, teacher trainees and educational administrators not trained in education basics.

This module is on the basic principles of group behaviour. It also outlines the mechanism of group dynamics with special reference to class-room instruction. It contains three main components: the objectives, the learning activities and the evaluation techniques.

A. Objectives:

This module will enable the student to:

1. Recognize instructional situations which involve group processes;
2. Differentiate between an individual's behaviour when alone and when in a group;
3. Interpret a learner's behaviour in terms of his interaction with other members of the group;
4. See the relationship between group processes and behavioural changes in learners;
5. Reason out the potential of instructional techniques which involve group processes in the development of higher cognitive abilities and certain affective qualities;
6. Identify the different directions group behaviour can take as a result of changing interactions;
7. Identify the influence of different factors on group behaviour.

B. Learning activities

There are four types of learning activity. They are:

1. Programmed learning material.
2. Discussion session.

---

1. *"Developing Instructional Modules for Teacher Education selected exemplar modules"*. APEID, Unesco Regional Office for Education in Asia and Oceania, Bangkok, 1978, P. 192 - 199.

3. Practical work.

4. Library work.

C. Evaluation

A test with an answer key is given at the end of the module.

Learning Activity 1: Programmed Learning Material.

Study the following Programmed Learning Material (PLM) to acquire basic information about the principles of group behaviour in various instructional situations:

Group 1. Programmes of teacher education that are in vogue lay little emphasis on training an individual teacher trainee in the processes of group behaviour. In other words, programmes of teacher training have overlooked the importance of developing teacher understanding of _____ behaviour.

Group 2. Not developing teacher understanding of class group behaviour is responsible for the inability of teachers to understand why groups behave as they do and how _____ behaviour can be used constructively in the development of certain instructional objectives.

Group 3. It is true that a group consists of a number of individuals. But, the behaviour of an individual when alone will be different from his behaviour in a group. This is due to the fact that an individual's behaviour is influenced by the group and vice versa; after all a group is made up of a number of individuals and hence, an individual's behaviour influences the _____.

Group behaviour 4. The difference between an individual's behaviour while alone and while in a group can be explained if we know the principles underlying the _____ of the group.

Behaviour 5. The behaviour of groups will become quite clear if the basic mechanism of group dynamics is explained. Let us examine the two words 'group' and 'dynamics'.

A _____ consists of two or more persons with common objectives.

Group 6. What is dynamics? Dynamics assumes a vectorial field; that is, forces with a direction. These forces may reinforce or negate each other.

Dynamics involves forces acting in different directions which may _____ or _____ one another.

Reinforce negate

7. There will be a state of stable equilbrium if the acting forces negate each other, that is the sum of the forces is equivalent to zero. On the other hand, if these forces reinforce each other, there will be motion in a certain direction.

   In other words, dynamics may involve _____ whose resulting sum is zero or which cause motion in one direction.

Forces

8. We have seen the meanings of the two terms 'group' and 'dynamics'. Let us see what actually is meant when both of these terms are put together. Group dynamics is the study of the forces exerted by the group on the individual or by the individual on the group.

   Many instructional techniques involve _____ _____ to a great extent.

Group dynamics

9. These instructional techniques include discussions, seminars, tutorials, and brain storming session, where in the individual by way of his observations, queries, comments are reactions to others' ideas influences the _____ and also the individual is influenced by the _____.

Group

10. The influence of the group on the individual will naturally bring out changes in the behaviour of the individuals concerned. Or in other words, group processes bring about _____ changes in the individual.

Behaviour

11. We know that individuals form a group and hence the behavioural changes occuring in an individual will, in turn, influence the _____ processes.

Group

12. Or we may say that the group processes and the behavioural changes in the individuals or learners in the class are interrelated.

   In other words, there is a relationship between _____ _____ processes and _____ in the learners.

Group behavioural changes

13. Let us take a technique which involves group processes, for example, the seminar. In a seminar, after the paper is presented, the group discusses the paper, which involves a lot of interaction among the members of the group.

   As we saw earlier, this interaction will bring about behavioural _____ in the members.

Changes

14. Due to the interaction among members of a group, behavioural changes take place in the members. These behavioural changes may be both cognitive and affective.

Or we may say that the interaction among the members helps in the development of _____ and _____ _____ abilities in the members.

Cognitive affective

15. The cognitive abilities are of a higher order, as they include application and analytical ability, critical thinking and evaluation ability; the affective attributes include tolerance, objective outlook and emotional stability.

So, we may say that the techniques involving group processes have the potential to develop higher _____ abilities and certain _____ attributes.

Cognitive affective

16. When we consider in depth the group processes going on in a classroom we find that there are different characteristics of a group which influence group behaviour. An understanding of these _____ would enable the teacher to direct the group behaviour in a desirable way which would be more interactive and productive.

Characteristics

17. Let us now see what these group characteristics are and how each one of them influences the group. We know that a group consists of a number of _____, each of them continuously reacting with others.

Individuals

18. This process of reactions between persons is called interaction.

Hence _____ is one characteristic of the group which involves the reaction of a number of persons to one another.

Interaction

19. Therefore, what a teacher should keep in mind is that every individual should get opportunities to participate in the discussion of the group. For certain behavioural changes, this is important because it causes _____ which, in turn, brings about these behavioural changes.

Interaction

20. To ensure maximum participation the group leader should display a number of attributes such as a democratic outlook,a willingness to clarify and elaborate whenever needed, tolerance and openness and constant encouragement to those who do not participate or participate rarely in the group discussion. The display of these attributes by the teacher would bring about maximum group _____.

Participation

21. The structure of any group is complex. A group consists of a number of individuals with different levels of ability which result in social stratification or hierarchy. In other words, a group has a complex structure which involves social _____ _____ or _____.

Stratification hierarchy

22. The size of the group will influence its structure to a great extent. The larger the size, the more evident would be the hierarchy or stratification. This would cause a split in the group leading to the formation of sub-groups. Due to the stratified or _____ nature of the group which is influenced by the size of the group, sub-groups may be formed.

Hierarchical

23. In view of this, a teacher should take care to see that equal status is given to all members of the group in the classroom.

Or we may say that the characteristic of a_____ or hierarchical group structure demands the provision of equal status to members of the group, in order to keep the group intact.

Stratified

24. We have seen earlier that in a group different individuals interact. Over a period of time this interaction develops a feeling of oneness or cohesiveness in the group. This _____ is the feeling of belonging which reinforces fellowship and sets the members apart from non-members.

Oneness or cohesiveness

25. Cohesiveness is a desirable characteristic that one should look for in a group. This makes the group behaviour more interactive and productive. Preventing friction and hostility will bring about _____ _____ in the group.

Cohesiveness

26. The teacher should take care to see that members are satisfied and the group is devoid of rifts and he should not give undue privilege to anyone.

The need for great _____ in a group demands a number of abilities in the teacher. Through these abilities the teacher can keep the members satisfied and united, without hostility or friction.

Cohesiveness

27. Any group has its own norms and goals and the participants are expected to conform to these. In other words, the group creates a standard of behaviour which is conducive to making the group behaviour interactive and productive.

_____ of _____ makes the group climate conducive to maximum interaction.

Standard of behaviour	28.	If we examine a group, we will find that it continues to exist because through interaction, individuals can better satisfy their own needs, desires, interests and aspirations. This is due to a sense of belonging. In other words, satisfaction is derived by the members of a group because of a sense of _____.
Belonging	29.	Therefore, it is the duty of the teacher to see that the group as a unit caters to the needs, interests, desires and aspirations of the members by bringing in a sense of _____ among the members.

Summary

It is important that teacher training programmes develop in the teacher an understanding of group dynamics in the classroom which would help in the attainment of several behavioural objectives and would help satisfy the needs of the members of the group. A group consists of two or more persons with common objectives. Group dynamics means the forces exerted by the group on the individual or by the individual on the group. Instructional techniques like seminars, discussions and tutorials are group processes employing group dynamics. Through these processes certain desirable cognitive abilities and affective attributes are developed in the participants. For effective group participation there is a need for a strong sense of belonging to generate more interaction among the participants. The teacher who is to direct these group processes should take care to see that equal status is given to all participants. Further he should be resourceful enough to see that the cohesiveness of the group is maintained and that its members comply with the norms set by the group. This would ensure an atmosphere best designed to help the participants.

Learning activity 2: Discussions session

The purpose of this activity is to clarify your doubts, if any, and provide you with an opportunity to express your own understanding of the content of Learning activity 1. This session will further help you to develop a better appreciation of the concept of group dynamics, as applied to instructional situations.

Now divide yourselves into small groups of about 15 members and discuss the material you studied in Learning activity 1. Discuss:

a) Any doubts you may have;

b) The application of the concept of group dynamics to instructional situations;

c) Affective attributes needed for group interaction.

Ensure the maximum participation of the group members. Your teacher will be the resource person, providing help when needed.

Learning activity 3: Practical work

Select a class in your school. Observe the classroom teaching of one teacher for at least 40 minutes. Your observation should focus on group interaction, the leadership role of the teacher, the extent of pupil participation and the involvement of the pupils in the teaching/ learning process. Prepare a brief report of your observation and discuss the same with your teacher.

Learning activity 4: Library work

Read the suggested chapters of the following books as enrichment activities:

Bany, M.A. and L.V. Johnson, Classroom group behaviour, New York, Macmillan, 1964. Part I, p. 11-29, Part II, p. 51-76 and Part III, p. 218-220.

Cartwright, D. and A. Zander. Group dynamics:research and theory. New York, Harper and Row, 1960. p. 69-95.

Paul, H.A. Handbook of small group research. New York, Free press, 1962, Part I, p. 7-23; Part II, p. 206-246.

Evaluation

Criterion referenced tests are given for evaluation purposes. Specimen items, situations and techniques are given as follows:

I. Circle the number of the best answer from the choices given:

1. Understanding group processes is essential for teachers beacuse it helps them:

   a) in solving the personal problems of the students;

   b) in dealing with large number of students at a time;

   c) in creating classroom situations to attain certain instructional objectives;

   d) in establishing rapport with the students;

   e) in recognizing differences among individuals.

2. Group dynamics has the unique feature of:

   a) assigning a definite role to each member of the group;

   b) an individual influencing the group and vice versa;

   c) prescribing the behaviour of each member of the group;

   d) determining an individual's behaviour in the group.

II. Given below are a number of instructional situations. Circle 'G' if the situation involves group processes and circle 'N' if the situation does not involve group processes.

   a) Performing an experiment in the laboratory. G N

   b) Putting a question in the class. G N

c) Reading self-instructional materials. G N

d) Studying in the library. G N

e) A pupil telling of his visit to the sea shore. G N

f) A pupil commenting on an idea put forward by the teacher. G N

g) A class listening to a school broadcast. G N

III. Fill in the blanks with an appropriate word or words to complete the following sentences:

a) During the discussion, individual's comments and reactions influence group _____.

b) Group processes bring about _____ changes in the individuals.

c) The interaction in a group helps in the development of higher cognitive abilities and certain _____attributes.

d) An understanding of group characteristics will enable the teachers to direct the _____ in a desirable way.

e) The teacher should take care to see that every individual gets an opportunity to _____ in the group discussion.

f) A large group would have _____ or _____ with respect to their abilities and social status which may cause the group to split into sub-groups.

IV. Answer in brief the following questions:

1. a) What is group cohesiveness?

   b) Why is cohesiveness necessary for a group?

   c) What should a teacher do to keep the class a cohesive group?

2. Define group dynamics.

3. How could the classroom situation be made conducive to maximum interaction?

Answer key:

I. 1. c) 2. b)

II. a) N, b) G, c) N, d) N, e) G, f) G,
g) N.

III. a) behaviour b) behavioural c) affective
d) group behaviour e) participate f) hierarchy or stratification.

IV. 1. a) Group cohesiveness is the feeling of belonging or oneness which reinforces fellowship and sets the members apart from non-members.

b) Cohesiveness is necessary to maximize interaction and make it productive.

c) A teacher can keep a group cohesive by satisfying its members making the group activities attractive and by not giving undue privilege to anyone.

2. Group dynamics involves an interplay of forces where the group behaviour influences individuals and vice versa.

3. The classroom situation can be made conducive by setting the norms and standardizing behaviour for the group.

Note: Any answer containing similar ideas should be considered.

Criterion measure of satisfactory learning:

There are 20 questions. Each question carries one point. Score your answers using the answer key. If your answer score is 15 or more, go to the next module. If your score is less than 15, consult your teacher and repeat the activities as per his advice.

Observation technique

For the evaluation of the teacher trainees' participation in a group, observation check sheet which follows will be used. The teacher educator will make tallies or grades (4 points) in the appropriate columns, and also record significant points put forward by each participant. These will be utilized to arrive at a qualitative grade for the teacher trainee, representing the extent of his achievement.

OBSERVATION CHECK SHEET

Name	1		Columns 2 to 9: tallies to be given
No. of questions and observations	2		
No. of points covered	3		
No. of supporting observations	4		
No. of supporting questions	5		
No. of high-level questions	6		
No. of high-level observations	7		
No. of clarification questions	8		
No. of irrelevant questions	9		
Speaking confidently	10		Columns 10 to 23: grades to be given GE=Great Extent SE=Some Extent LE=Less Extent NA=Not at all
Speaking coherently	11		
Speaking precisely	12		
Concentration on the discussion	13		
Sharp comprehension of ideas	14		
Openness to others' ideas	15		
Objective outlook	16		
Elaborating ideas put forth	17		
Integration of different ideas	18		
Initiative ability	19		
Facility of language	20		
Self contradiction	21		
Getting excited	22		
Getting impatient	23		

Chapter Eleven

SIMULATION EXERCISES AND GAMES

What is behaviour simulation?

Formal learning activity, whether for children or for adults, removes the learners from the reality situation. There has, therefore, been a continuous search for ways of bridging the gap between the formal learning attempts and the reality. Simulation is one such way, and has been found to be exciting and useful in the fields of defence research and training of managers. Simulation has been characterized by an attempt to imitate and create some dimensions of reality based on an understanding of interrelationship governing it.

Behaviour simulation exercises simulate the processes of human behaviour, and interpersonal interaction is an important part of such simulations. Behaviour simulations are primarily focused on the process, and learning of and about the process. Process is concerned with why and how of behaviour. For example, a behaviour simulation would focus on how decisions are made, and with what consequences, rather than on the decisions made.

Amongst behaviour simulations distinction can be made between exercises and games. Games have set rules, predictable result, hidden design to highlight or demonstrate a behavioural process, and they produce dramatic effect. The games are quite effective in their purpose but they can not be played again and again. On the other hand, simulation exercises simulate a process, with enough scope for improvisation, adaptation, and redesigning according to the situational needs. Some authors use the term "structured exercises" to denote all kinds of simulations.

The relevant concept of learning for behaviour simulation relate to process of learning and managing the process more effectively. The following 15 different conditions may be listed to make learning effective. For this purpose, learning has been defined as "the process of acquiring, assimilating, and internalizing cognitive, motor or behavioural inputs for their effective and varied use when required and leading to enhanced capability of further self-monitored learning".

1. Authentic and open system of training institution or the place or learning.
2. Non-threatening climate.
3. Challenging learning tasks.

4. Collaborative arrangements for mutual support of learners.
5. Organization of graduated experiences of challenging successes.
6. Mechanisms for supportive and quick feedback.
7. Opportunities to practice skills learned.
8. Opportunities to apply learning.
9. Opportunities for and encouragement to self-learning.
10. Opportunities for and support to experimentation.
11. Emphasis on learning discovery.
12. Indirect and liberating influence by trainer/teacher through minimum guidance.
13. Trainer's/teacher's human values and faith in man.
14. Trainer's/teacher's high expectations from learners, and openness to examine own needs.
15. Trainer/teacher competence.

Elements in behaviour simulation

Behaviour simulations involve several dimensions. The following are the main elements in the various exercises and games designed and used.

1. Objectives: It is necessary that the designer of the simulation and one who uses simulation with a group is clear about what the main objective of the simulation is. This objective may be in terms of the purpose of simulation: whether it is to demonstrate certain ideas, or provide cognitive learning, or give insight into behaviour, or provide opportunity for the learner to practise skill, etc. The objective may also be stated in terms of the specific outcomes which are expected from the simulation exercise.

2. Cognitive framework: A simulation exercise should be based on a clear understanding of the cognitive linkages between various elements involved. Every simulation exercise has an underlying cognitive model. Simulation may not be effective and successful unless the cognitive framework is clear. The cognitive framework provides the designer of the simulation enough opportunities to simulate the various dimensions effectively.

3. Variables simulated: A simulation exercise simulates either the thought process, or a behaviour process, or some elements in group work. The designer as well as the user of the simulation exercises should be quite clear about the variables which are involved and which are being simulated.

4. Roles: All behaviour simulation exercise and games involve some roles which the learners or the participants take and play during the simulation exercise. These roles are designed according to the purpose and the nature of simulation.

5. Interaction: All behaviour simulations involve interaction usually amongst people, or if the exercise is being played by an individual alone, then between him and the simulated roles.

6. Rules for behaviour and interaction: Simulation exercises predetermine what rules will apply to the behaviour and interaction amongst the various rules and participants involved. It is determined in advance that certain things may be permitted and certain other things may not be premitted. This is done to make simulation effective. Such control of certain variables is necessary for directing and channelizing simulation into a specific way.

How to use behaviour simulation

Several elements are involved in the use of simulation games and exercises. To make these exercises effective for purpose of learning of various kinds, it is necessary that due attention be paid to several aspects. The following suggestions are made in this regard:

1. Facilitator: Facilitator plays the crucial role in behaviour simulation. The facilitator plays several roles and guides simulation according to its purposes. He is a resource of expertise on a particular topic which is involved in simulation. He also plays the role of theory building, in the sense of evolving a cognitive model out of the experience which people have by relating various elements which emerge out of the experience into a meaningful cognitive understanding. This would mean that the facilitator integrates experience and data generated by experience with the cognitive elements involved. The cognitive elements do not hang loose, separated from each other. On some occasions, the experiential data may not necessarily fit into the cognitive framework which the facilitator has prepared, and is ready to use at the end of the exercise after the data are generated and discussed in the group. On such occasions the ingenuity of the facilitator in weaving the data into a cognitive framework showing the various inter-linkages is crucial.

The authors' experience is that such occasions provide the most thrilling moments for insightful understanding and creative theory building about the experience generated. The facilitator as a theory builder should be well read in various theories, as well as should be creative so that he is prepared for rethinking and his current knowledge does not necessarily freeze him into inactivity if the data generated is quite different from the expected data. The third role of the facilitator is that of process facilitating. This role is an important role in making simulation effective for behaviour change. The facilitator uses simulation to help the learners become aware of certain behavioural processes, and thereby facilitates behavioural change. The fourth role is the managing and administering role, making necessary arrangements and seeing that simulation exercise is conducted according to the plan. The role of the teacher/facilitator is very important in organizing learning activities. In the area of learning of basic skills in reading and arithmetic, academic engaged time has been found as the most important factor in learning. This seem to be true in other areas also.

2. Participants or learners: Although the simulation exercises or games are constructed with predetermined rules, and several variables are determined and controlled in advance, the participants or learners should have enough freedom to respond to situations in their own way and learn by their experience. Without such freedom the simulation may merely result in game or exercise which may not lead to experimentation of behaviour on the part of the participants.

3. Insight learning: It is necessary that behaviour simulation produces insight in learners. This is possible when the learner is involved in the simulation through his behaviour, is able to see the consequence of his behaviour and the results obtained. As already stated earlier, one of the roles of the facilitator is to process the data of behaviour generated in the simulation so that the learners are able to see the relationship between what they did and their consequences in terms of simulation.

4. Cognitive learning: Behaviour simulation should also result in cognitive learning. If simulations are used merely to provide experience, and necessary insight to participants without trying the experience in a cognitive framework which explains what the participants experienced, they may remain only exercises of behaviour modification. Some facilitators do this by providing simulation experience to the participants and then leaving the participants to draw their own conclusions. In the opinion of the author, however, the purpose of behaviour simulation is not fulfilled unless the cognitive framework emerges and the facilitator concludes by summarizing the cognitive framework. He may certainly not give the cognitive framework himself, and may elicit the necessary learning from the participants by asking appropriate questions. But his responsibility to derive cognitive learning and to help the participants see cognitive connections amongst various elements of experience in simulation can not be neglected.

5. Flexibility: Behaviour simulation should not become a routine exercise or a ritual. In many cases the exercises or games may be followed by the facilitator without exercising his own judgement and creativity. As already discussed, the facilitator needs to exercise his own creativity. He may innovate the rules according to the changes occurring in the group. He should also feel free to drop some part of the simulation as the exercise develops and if he feels that this may be required. However, it should be made clear that only a facilitator who has had enough experience with such simulation exercises and who has developed enough self-confidence and insight in his own behaviour may feel free to do so;and then freedom may be creative. If, on the other hand, the facilitator uses his freedom only to escape out of the difficult situation developing in the situation, he is misusing his freedom. The distinction should, therefore, be made between flexibility as a convenient way of getting out of some difficulties, and creative flexibility which enhances the value of simulation and adapts it to the need of the situations.

6. De-briefing: One of the criticisms aginst some simulation games and exercises is that exercises are designed without the knowledge of the participants as to what processes they are being exposed. An

ethical question is raised about the propriety of doing something with a group about which the group is not aware. If an exercise is used as a diabolical measure to produce change in people, and people do not know about it, this becomes unethical. One important dimension, therefore, of behaviour simulation is sharing the rationale and the purpose of simulation after the simulation is over. This may especially be necessary in exercises in which conflicts, competition, trust, etc. are simulated, and interpersonal trust or lack of trust, co-operation or conflict are generated as part of simulation. The participants should be debriefed about the entire exercise after data have been collected through questions and interviews with those who participated. Debriefing becomes a necessary part of simulation in which attitudes, values, behaviour, etc. are involved.

Designing behaviour simulation

Several steps will be involved in the designing of behaviour simulation. Those who have worked with simulation for purposes of education and training have defined ways of designing simulation. Turelker[1] has given 13 specific steps in designing instructional simulation systems as follows:

1. Define instructional problems.
2. Describe the operational educational system.
3. Relate the operational system to the problem.
4. Specify objectives in behavioural terms.
5. Generate critierion measures.
6. Determine appropriateness of simulation.
7. Determine type of simulation required.
8. Develop specifications of simulation experience.
9. Develop simulation system prototype.
10. Try out simulation system prototype.
11. Modify the simulation system prototype.
12. Conduct field trial.
13. Make further modification to the system on the basis of the field trial.

The advantages of simulation for teacher education have been very well summarized by Cruickshank[2]. Reviewing various studies made on the

1. P.A. Turelker: "Designing Simulation Systems" in "*Introduction to the Systems Approach*" Englewood, N.J. 1972

2. D.R. Cruickshank "Teacher Education looks at Simulation" in "*Educational Aspects of Simulation*" London, McGraw Hill 1971.

use of simulation in teacher education, Cruickshank summarizes the following main advantages of simulation:

1. Simulation establishes the setting wherein theory and practice can be joined.
2. Simulations force students to take action and bear resulted consequences. Cruickshank quotes Carl Rogers that the students find it necessary in simulation to make a personal decision based on the information available and bear the responsibility for the consequence of the decision and the action taken.
3. Simulations are relatively safe.
4. Simulations are psychologically encouraging.
5. Simulations promote control.
6. Simulations broaden the training horizon.
7. Simulations are relevant.
8. Simulations enable the student to be himself.
9. Simulations seem to work.

Resource Material

Recent interest in behaviour simulation has stimulated publication of games and exercises. Pfeiffer and Jones have started regular publication of handbooks of exercises and games. So far, seven volumes have been published. Since 1972 they have been publishing annual volumes containing several games and exercises as well as conceptual material which are relevant to behaviour simulation. They call these structured exercises for group experience and human relations training. Some books on simulation games and exercises, tried out in Asian countries, are under publication. One game is briefly described in the Appendix 11.1.

Appendix 11.1

In this appendix sufficient details have been given about a game which originated in a research in educational psychology. The game is described in details to enable to readers to use it in training in education management.

Tower building game

Objectives

The following are the main objectives of this game:

1. Understanding the origins of achievement motivation. The game can be used to indicate how achievement motivation develops in children, why some children have high achievement motivation and others have low achievement motivation.

2. Insight into the values and the culture. The game can also be used to help the participants become aware of the values they hold in relation to other people while working with them, how such values have been formed by the process of socialization, and how the culture in which they live, whether it is the family culture or the organizational culture, contributes to the development of such values and with what consequences.

3. Insight into the goal setting process. The game can be used to have an insight into the dynamics of process of goal setting in which the person who sets the goal, or at least is involved in achieving the goal, and others working with him contributes to this process.

4. Understanding the role of expectations in the motivation for and the level of performance of a task. The game is mostly used to illustrate and demonstrate how expectations of significant people around a person influence his motivation to perform, as well as the level of his performance.

5. Understanding the role of help in the motivation for and level of performance. The game also helps people to understand the role of two significant helping behaviours namely giving instructions and directions and encouraging the persons. The roles of these two behaviours are significant and have different implications at different levels of the working of the person.

The material

The game is played with wooden cubes or wooden blocks. Experience shows that cubes of about 1½" dimension are useful for the game. These cubes can be bought or constructed out of oridinary wood. Usually about 25 cubes would be needed for playing in one group. If multiple group exercise is to be conducted, more cubes would be needed, at the rate of about 25 cubes per group. One handkerchief or a cloth or a ready-made blindfold is also necessary for each team.

Time

Usually it takes about 10 to 15 minutes to play the game, but needs much more time in processing. Experience shows that if a single group is playing the game, about one hour is needed. However, if more than one group plays the game, more time may be needed and it may be useful to keep about 2 hours time for the exercise.

Conducting the exercise

The following suggestions may help in conducting the exercise:

1. The trainer first asks for volunteers to play the game, usually at least three volunteers. In asking for the volunteers it may be stated that these persons would be involved in playing some roles and playing the game together. There is always one person who has to play the game (henceforth called 'self' or S) and two persons are chosen who are significant persons in relation to that role (henceforth 'significant others' or SO). For example, the exercise could be conducted in a family setting where one person plays the role of an 11 year old boy (S), and two other persons play the roles of his parents (SOs). If an organizational situation is selected then the S can be a junior person like a worker, or a superintendent, or a manager, etc. and the SOs would be senior persons in relation to his role. Any situation could be used in playing the role.

2. After some persons volunteer to play this role, the trainer gives instructions to the observers. It may be useful to ask the role players to go out of the room and then the trainer may give instructions to the rest of the participants. These instructions can also be stencilled and distributed to the observers.

3. After giving the instructions to the observers the players are brought back to the group and they are given instructions when the game begins. The instructions may also be typed and handed over to the players to read.

   After the players have been given the instructions, the trainer makes the following statements:

"Well, now we would like to start the exercise. However, before we start the exercise I would like you to individually write on a small piece of paper your own estimate how high a tower (in terms of the number of cubes) the child (or worker, etc.) will be able to make. And the child (or the worker, etc.) will also give his estimate of his own performance. Now are you ready? Write down your own estimates."

4. All the three persons playing the game then write down their estimates. At this stage the trainer can ask the observers also to write down individually their own estimates. After the estimates are taken individually from the three role players, the trainer reveals them and says that there are three estimates (usually there will be differences in the three). Before the exercise starts he would like to have only one common estimate which is agreed upon by all the three players. He then asks them to discuss together and give him one common estimate.

5. After the discussion is over, and after the final figure is given, the game starts. The trainer explains to the SOs that they can not do two things. They can not touch the person who is building the tower nor can they touch the wooden cubes. If they ask him questions whether they can give instructions or what other things they can do he simply answers that they can do anything they like, but they can not do these two things. It is useful for the instructor not to answer specific questions but only repeat this sentence again and again when any question is asked: "You can do anything you like, but you can not touch the person who is building the tower nor you can touch the cubes."

6. Then the exercise is conducted after blindfolding the S. After the last cube falls down the exercise is over. Then all persons assemble in the room and the trainer writes down the various figures on the board.

Processing the exercise

Processing of the exercise is the most significant part for training. If the exercise is not properly processed then it may merely become a piece of entertaining or an exercise from which different persons can derive different points of learning, and may fail to be a very strong and useful source of learning. Enough attention should be paid to the processing of the exercise. It may be useful for the trainers to read several original articles and other literature so that they have enough grasp of the various concepts to be evolved from the discussions of the experiences in the expertise.

The main purpose of processing of an exercise is to help the participants to examine their experiences, and analyze them for some significant learning. While generating such experiences the trainers may help to evolve some conceptual learning around which various experiences may meaningfully hang, and get integrated. Trainers may differ in their styles of deriving the learning from the experience. While some trainers may prefer to let the participants develop their own learning points, and get their various messages from the discussions, some other trainers may prefer to have detailed discussions, and later provide necessary information from the researches done and provide a framework at the end which the participants may find useful for understanding their experiences and to put all that they have discussed and experienced in a conceptual context so that they may be able to use this learning later. The learning thus, gets integrated and internalized.

The following are the various stages of the processing of the exercise.

1. Recording the data: Whether one group or more than one group have played the exercise, the trainer should get all the data from the exercise and write down on the board. The data obtained from two groups in one organization are given in Table 11.1.

Table 11.1

Data from two groups

	Group A	Group B
Average	9	9
Significant other 1	5	12
Significant other 2	4	10
Self	10	6
Consensus	7	12
Achievement	7	14
Instructions by significant 1	low	medium
Instructions by significant 2	high	high
Encouragement by 1	low	high
Encouragement by 2	low	high

If directions and encouragement are rated by different observers, these may be collected and the average figures may be put down on the board. In case this is not done, then these two things may not be written down.

2. Goal setting: In the first part of the exercise the different expectations about the S's performance are put down when the trainer asks the players to give estimates of the performance of the S. The trainer may ask each player why he had a particular figure, of the estimate, and especially ask in relation to the lower or higher figure compared to the average given by the trainer, i.e. 10. He may also get

the various reasons they had in mind while putting the estimates. Some of these reasons may not be fully articulated by the role players, but the trainer can help them to articulate them even though they did not consciously think of those reasons at the time of giving these estimates. But the trainer should encourage them to give the rationale even when this was not clear thought. The various rationale which come out for giving lower or higher figures than the average are as follows.

Reasons being given for having low expectations than average

Usually the following reasons are given for having lower expectation than the average figure.

a) I want to ensure the success of the S.

b) The task is too difficult for the S, because he is blindfolded, the wooden cubes are rough, he is working with his left hand, etc.

c) I do not know his capability and therefore I do not want to put higher estimates.

d) I do not want to inflate his ego by showing higher expectations from him.

e) He is below average.

f) I can do only so much, and so I make similar estimates for him. He may not be able to do more than what I can do.

g) Having lower expectations will encourage him.

If we examine the reasons given above for having lower expectations, we find that the first five reasons are more or less the same. All these five reasons are based on the logic that the S is below average, and the SO does not trust his ability to take risk or stretch himself. Why should a person ensure success of the other person unless he doubts the latter's ability to meet the challenge and to take risk and then succeed. Similarly, the second reason where the task is seen too difficult and handicaps are seen as too many, and so the expectations are put lower. It has the same logic behind it. The task being regarded as too difficult or the handicaps being exaggerated only indicates the lack of trust in the ability of the other person to deal with such difficulties and to overcome any obstacles which are seen in the situation. This again indicates doubts about the ability of the person. The third reason is also similar. Unless the person knows another person, he may doubt his ability and this may in general show that the tendency of the person is to have low expectations from others.

And, of course, the fourth reason indicates that the person does not trust the ability of the other person to meet the challenge, to succeed under difficult situations,and yet remain self-confident and not become vain. Doubt in the ability of the person to remain calm under success also is indicative of the lack of trust in the other

person's ability to deal with or cope with the situation including success. We thus see that the first five reasons have more or less the same logic, i.e. lack of trust in the ability of the other person.

The sixth reason is an interesting reason, for it shows that the SO does not want others to achieve more than what he has achieved in life. This has serious implications since unconsciously he may also come in the way of the achievement of other people. The person should seriously reflect on this reason and its implications.

The last reason namely that having lower expectations will encourage the person can be explored by the trainer by interviewing the S. If the interview is properly conducted, it will come out that the S feels very bad about the lower expectations, because it shows the SO's lack of trust in his ability. No one likes to be underestimated. And so it may come out in the interview that lower expectations, inspite of encouraging the person, in fact discourages him. The logic that having initial lower expectations, and then letting the other person achieve higher performance, may encourage the person is only defensive thinking, to give the reasons for lack of trust in the ability of the other person.

It may be useful for the trainer to write down the various reasons on the board and probe further to encourage people to think of what rationale they may have or they might have in their minds when they put lower expectations. Then the implications of these expectations may be discussed. While discussing the implications, it may be useful to comment on the role of expectations in raising or lowering the level of performance, and also in raising the level of achievement motivation. We shall come to this a little latter.

Reasons for having very high expectations

Some people may give figures which are very high compared to the average. These may be beyond 13 or 14. The following reasons are often given for setting very high standards.

a) I want to set an ideal goal for the person.

b) I want to encourage him.

As far as the second reason is concerned, it may be again clarified by interviewing the S. If properly interviewed, it may come out that the person after hearing extremely high expectations become nervous, and instead of being encouraged, he becomes anxious. He thinks that the expectations are too high and he may not be able to meet them. In fact, too high expectations increase the possibility of failure because the person is much more anxious and is afraid to fail. Such very high expectations thus do not encourage the person but increase his anxiety.

It may be pointed out by the trainer that to set ideal goals is one way to make failure more or less certain. No one reaches the ideals. Ideals continue to illude people. Ideals are good as far as general goals are concerned, but when specific tasks are to be done,

ideals become the enemy of good performance. In a way it can be pointed out that having lower targets than average, or very high targets compared to the average, psychologically have the same effect, namely they create fear of failure in different ways and the person, in order to avoid failure, may either set the target too low and therefore may have success about which he is not thrilled, the success without any challenge. Or, he may set the target so high that setting a very high targets itself may become an alternative to action, and he may be satisfied merely in setting the target and eventually fail.

Reasons for having moderately high expectations

Those persons who have higher expectations than the average, slightly higher to make their goals more challenging, give the following reasons.

a) I have confidence in him.

b) I want to create a challenge for him, and I am sure he will be able to take this challenge.

c) He is better than the average.

d) I can myself do and therefore he can also do it.

e) I shall be available to help him.

If we examine the above reasons, they fall into two categories. The first four reasons indicate the person's trust in the ability of the other person, his confidence that he will be able to do more than the average, and therefore his high expectations reflect the general approach he may have towards people, expecting that they may be able to meet the challenge. The second reason (represented by the fifth reason given above) is very interesting. The trainer may like to cite some instances from the literature on the role of expectations in performance. For example Livingston (1969) cites "Sweeney's miracle". People can create miracles by helping others to have high performance in two ways: firstly by having confidence in their own ability to be able to get the best out of the other person. The trainer, therefore, during the first phase of the processing on goal setting may emphasize the role of expectations in raising performance level.

He may also emphasize the role of expectations in creating the level of achievement motivation. In this regard he may cite the results from researches where it was established that parents who had higher expectations from their children created a climate in which children had higher achievement motivation. In case of those parents who had lower expectations from their children in this game, it was found that their children had lower achievement motivation. The expectations therefore play a very important role.

3. Developing consensus: The second phase of the game is where the consensus is developed. The three figures which the three different role players have given to the trainer have to be evolved into a common figure. The trainer asks the three role players to reach a consensus and give him a common figure. He may ask the

observers to indicate who influenced the decision-making most. When the goal is mainly dictated by the significant persons, the person performing on the task does not develop achievement motivation. If these people help the other person to understand the various dimensions, and raise several questions which may be relevant for the S to consider while taking the final decision, they help him in the process. However, the decision should be taken by S himself. Influencing the decision and imposing the decision lowers achievement motivation.

4. The last part of the process analysis relates to the behaviour of the SOs while the tower building is in progress. During the tower building, the SOs may either give directions or instructions or they may not. Similarly, they may encourage or they may not encourage. The observers are given the task to find out, and note down, how much encouragement and how much instructions and directions they are giving to the other person. The role of directions or instructions is a very interesting role. Directions are given to those people in whom we do not have enough trust that they will be able to do things on their own. Therefore, giving too many directions may indicate lack of trust in the ability of the other person, and indirectly gives the message of lower expectation.

However, when directions are needed, or desired by the person, or when the task becomes too complicated, then the role of directions is positive and helpful. For example, in the exercise very few directions are needed in the beginning of the game. The person is able to build the tower up to a few cubes without any difficulty. However, later on the S may need to know where he has to place and how much he may move and in what directions etc. The directions at this stage may be useful.

The role of encouragement is quite different. When the person is putting the cube and the SOs are encouraging him they are in fact showing their interest in him and indicating their emotional involvement in what he is doing. The observers should be asked to note down the various words people use in encouraging. Whether these words are indicative of appreciation like 'good', 'splendid', 'very well done', 'you are doing very well', etc., or they may indicate the interest in the SO, for example when feedback is given to S about how many blocks he has built or some statements like 'your tower really looks beautiful' etc. These obviously have no direct relationship with the task being performed. But such words and expressions encourage the person and they indicate to him that the SOs have not only trust in his ability, but they are interested in his performance and they are watching with interest and warmth. This contributes to the development of higher achievement motivation and also raises the level of performance.

While processing the data it may be useful for the trainer to refer to the actual experiences the groups have had. He may get the figures from one or more than one group on the board and then refer to these figures to indicate how some of these things are reflected in the figures which have been collected. Sometimes the data come out like in a classical experiment. And in such cases the effect on people is

dramatic. They are able to see clearly how the effect of expectations, etc. For example, the data reproduced in Table 11.1 clearly indicate this.

From the figures in Table 11.1 it is obvious that in Group A the performance of S, who had self confidence that he would be able to make slightly more than the average, was brought down by several factors including the lower expectations from both SOs, and his achievement was much lower than the average, and also lower than what he himself had expected. On the other hand, in group B, S did not have self confidence. However, higher expectations by the both SOs, their encouragement to help him to raise his expectations, and their later behaviour in which they gave necessary instructions but provided more encouragement helped the S to achieve much higher than what he had expected, and also higher than the average.

It was interesting to observe that the SO who had low expectation in group A, asked the other SO not to give any instructions and not to say anything and let the S work alone after the S reached the fifth cube. Later on when he was interviewed he said that he wanted to test whether the S will be able to make higher than 5. He said he was satisfied that he had made 5 which was his expectation and he did not want to give him any help. It took him a long time to realize that his lower expectation had in fact prevented him from giving any help and unconsciously he wanted the other person to fail and to fulfil his prophecy that he can not perform higher than a particular figure.

The interviewing took much longer and there was a lot of defensive behaviour on the part of the SO who had both given lower expectations and not only himself did not give necessary instructions and encouragement, but also wanted to prevent the other SO to give instructions and encouragement. Eventually, however, he did realize and later on he acknowledged that this was probably his problem even with his own children that somehow inspite of his best intentions he might be discouraging people.

It is necessary that the trainer uses various data from the experience in the exercise, and probes enough to be able to get various feelings in the role players. He should also provide several findings from researches to enrich his session by focusing on the role of expectations in high or low performance, and in raising the standards of achievement motivation. The trainer should also take the opportunity to discuss the roots of achievement motivation, to show how achievement motivation may be developing in children. He may cite results of researches from some studies on child rearing practices to indicate how training in independence in the early years of the child's life may contribute to the development of achievement motivation in the child.

For example, he may refer to findings from Winterbottem (1958) or other studies done in various other parts of the world. He may also like to refer to McClelland's findings (1961) how achievement motivation increased in the Greek studies, and later it decreased because the child rearing practices had changed when the Greeks brought the

slaves after their period of glory and had left their children to be brought up by them and so the whole process of socialization was quite different.

The trainer may also like to take an opportunity to stress that process of socialization is not confined to family only. While we are spending most of our waking hours in the work organizations, work organizations are important places of socialization, and are important agents of socialization. The trainer may like to focus on the role of organizations in raising the standard of performance and also increasing achievement motivation amongst people. The role of the senior managers' behaviour with their junior colleagues may be important in this connection.

Chapter Twelve

IN-BASKET EXERCISES

What is in-basket

In-basket is another form of simulating reality and training the person in near reality situations. The in-basket exposes the administrator to a series of situations he is likely to face in a short period and tests his ability to handle these situations. On the basis of such testing feedback is given to him through discussion (in the class, in small groups or individually). The feedback is generally in the form of analysis, pointing out the advantages and disadvantages of the decisions he has taken, the way he went about understanding the problems, organizing information, planning action etc. The in-basket or in-tray, as its name suggests, uses day-to-day decision-making situations which an administrator is likely to face in the written form from various sources.

These decisional situations are shown in the form of an "in-tray" which may contain letters, notes, memoranda, requests, directions, government orders, leave notes, problems etc. for his attention. During a limited period of time (about an hour or so) he handles as many of these items as possible by writing on each piece of paper what he decides to do about the matters it contains. The material are handed over to him in an envelop and at the end of the time period his decisions are discussed. An example given in the appendix 12.1 makes the in-basket technique clear.

This technique is useful particularly in training for decision-making skills. Educational administrators at various levels are required to make decisions. In fact, an education manager spends more than 50 per cent of his time in making decisions which can be included as in-basket exercise. An administrator corresponds with people, meets people for brief periods of time on various matters, including evaluation of students, examination results, teacher transfers, location of schools, upgrading schools, requests for inagurating functions, requests for guidance, complaints etc. Effective dealing with these requires decision-making ability, including situational sensitivity, sharpness in reaction, information processing ability including prioritizing etc.

While serving as an aid to teaching and training, 'in-basket' is useful in the following ways:

1. It condenses a large amount of decision-making experience into a relatively short period.

2. It integrates information pertinent to basic managerial functions, such that, the importance of overall balance among these functions may be understood while making decisions.
3. It indicates the necessity of managers reaching valid decisions with incomplete data.
4. It can be used for management research.

Some of these abilities can be sharpened through in-basket training. In-basket training can be used to develop the following abilities and characteristics.

1. General activity level.
2. Understanding a situation from various angles and using every information available.
3. Adaptability or flexibility as reflected in the case with which he can change the gear, go from one topic to the other.
4. Problem analysis ability.
5. Time perspective.
6. Planning and organizing abilities.
7. Leadership abilities.
8. Initiative.
9. Concern for priorities.
10. Delegation.
11. Forcefulness.
12. Helpful attitude.
13. Communication abilities.
14. Emotional maturity.
15. Managing conflicts.

Developing in-basket material

For developing in-basket material a thorough understanding is necessary of the role for which the material are developed. The trainer should spend some time observing some typical behaviour and reactions of some role occupants. He should actually be with them, observe them in action, look at their correspondence, interview them, and interview, if necessary, some of those with whom they deal. He should make an exhaustive list of the various decision situations the role occupant faces in his job. He may note down these situations in the same form in which they occur. The trainer may repeat the process and make another exhaustive list of such decision situations by observing a role occupant who is considered relatively more effective and another who is considered relatively less effective. Thus the trainer not only gets a

variety of situations but also gets ideas about effective handling of situations which he may be able to use in actual training.

On the basis of the list he prepares he may select a few and arrange them in the form of an in-basket. Some suggestions for organizing the in-basket are presented later in this chapter.

After preparing the in-baket, the trainer may prepare an analysis sheet which should describe all the capabilities the in-basket may measure and indicators of these capabilities.

The in-basket may then be administered to a group of administrators considered to be effective. Their responses may be analysed. They may be interviewed to understand their rationale for prioratizing decisions, for taking certain decisions etc. At this stage the trainer may examine whether the responses of these administrators are in line with the theory or approach he wants to use in the training. If it is not, he may like to test out his approach with them. Once he is clear and convinced about the orientations he would like to use in the training, he may revise and finalize the analysis sheet which is to be used in the training.

The in-basket material could be continuously revised and new materials may be added during training programmes.

Organizing the in-basket materials

The following steps may be followed in organizing in-basket materials.

1. Prepare a role description for the role and present in the exercise.
2. The background of the role and the role relations should be depicted preferably through an organization chart included as a part of instructions.
3. The in-basket package should be in accordance with objectives of training session.
4. Other information such as the problems, main personalities etc. of the organization or administrative set up may also be given.
5. Time provided should be specified and limited. Time could be limited by including certain events which limit the time available for decision-making on papers, etc.
6. Following papers, for example, may constitute the package of papers in in-basket.
   a) letters from outside parties, higher officers, community leaders, politicians etc.
   b) routine departmental reports, complaints from other departments,
   c) requests from the people in the department for leave, promotion, transfer, etc.

d) newspaper items and reports affecting the department, etc.

7. Materials may be classified into following categories for their balanced inclusion in the exercise:

   a) mutual interface items (competition between parties, conflicting orders, opinions, disagreements over a matter, etc.). If matter 'X' affects 'Y', matter 'Y' also affects 'X',

   b) one-way interface items:'X' affects 'Y',

   c) isolated items or rare events on which decisions could be postponed,

   d) distractor items which do not have any significance.

8. The items may be randomly mixed and ordered. It should be left to the participant to arrange and interconnect the items.

9. There should be 'in-basket' packet for each participant. Participants should be seated on separate desks.

10. Lengthy exercises may be given as home assignment, to be followed by discussions in the class.

11. An ideal solution should be developed by the trainer, before the training session starts.

12. The in-basket process consists of the following five stages:

   a) briefing,

   b) sitting arrangement,

   c) distribution of packets,

   d) commencement of exercise, and

   e) discussion.

13. The following may be considered for discussion of the in-basket:

   a) A consideration of the trainee's plan of attack (arrangement of materials:important to less important, inter-connection of materials, developing answers for the present as well as for future actions)

   b) Assessment of the substantive materials and completed decisions.

   c) Search for optimal solution on substantive materials, if possible.

Appendix 12.1

THE DISTRICT EDUCATION OFFICER

The following in-basket is for a District Education Officer (DEO or also called as Inspector of Schools). A DEO is in-charge of educational activities of a whole district. The district may have a few hundred schools. His functions include visits to schools, supervision and guidance, locating new schools, resource mobilization, ensuring that examinations are properly conducted, appraising headmasters, posting and transfering teachers, selecting and posting support staff, distributing resources and equipment received from outside agencies, collaboration with other district authorities, disbursement of salaries and grants to schools, staff management etc.

The DEO is assisted by one or two deputy DEOs who may be stationed in the same town or in another town. He has his own staff. He reports to the Director of education who is at the State headquarters. There are also other Directorates like Directorate of adult education, Directorate of girls education, Directorate of technical education with whom he may not have formal reporting relationship but has technical working relations. His other staff include an administrative officer, a finance and accounts officer, a buildings officer and a few clerks.

Instructions

Although the situation in this exercise is artificial, with some unrealistic restrictions on the time allowed to you and methods and activities you can employ in communicating with others, the problems you will deal with are real, having been obtained from actual situations which educational supervisors encounter in their jobs.

You will work as Mohd. Hasan, district education officer of Impala district. The villages in this district are spread over different places. Going from school to school takes a long time. As per the rules of your department you are required to visit every school at least once in a year. Due to floods in your district during monsoon of this year you could not visit most of the places as per the general schedule you made. Now that the year is ending you must send your appraisal report of all schools and you can not write an appraisal report without visiting the school. You are now in the process of completing your visits with only 18 days left of the current year.

You have just now arrived at your headquarters after a visit to three schools in the northern part of your district. You have to visit a cluster of 15 more schools in the southern part. Reaching the

nearest of these schools takes about one day by a jeep. Today is Sunday, 14 December 1980. You submitted your tour plan a fortnight ago to your director. You plan to leave this morning at 10.00 a.m. Before leaving the town you have gone to your office to look at your mail. It is now 9.00 a.m. On your desk you have found the following papers accumulated during the last one week of your absence. Shekhar, your secretary, left them all on your table. You will have one hour to do whatever you can to attend to the problems which the materials present.

Remember the day is Sunday, 14 December 1980. You can not reach any one for secretarial help. You must work with the materials on hand. Please write down everything you decide to do. Make memos to yourself about things you would like to do when you get back from the trip after a week; draft letters, if necessary, for your secretary to prepare; memos of what you have to say if you decide to make phone calls (none of your staff are available on phone and their availability at home is uncertain). Write your plans, intentions etc. Outline the agenda of meetings if you want to call. Remember, everything you decide should be written down.

For the sake of convenience the in-basket material are numbered from 1 to 20, but you are free to decide the order in which they should be handled. Please identify all your notes with reference to the in-basket item number.

Item 1

Directorate of Education

7 December 1980

Dear Mr. Hasan,

There was a report from one of the villages of Bandariya School that there was mass copying during the supplementary examinations. It has been alleged that some teachers are involved in encouraging private tutions. Please investigate the matter and send a report as you are visiting this school on 19 of this month.

Yours sincerely,

Sd/-
Director

Item 2

Directorate of Technical
Education, Headquarters,

2 December 1980

Dear Sir,

This directorate intends to open a polytechnic in your district. We have indentified Ratnapur as one of the possible places for this. We intend to take about 200 students every year. Please let us have your estimates of school leavers for the next five years for all the schools within a radius of ten miles from Ratnapur. This will help us to work out whether we will have enough students. Please supply us the statistics as soon as possible.

Yours faithfully,

Sd/-
Dy. Director (Planning)

Item 3

Anupsagar,

8 December 1980

To
The District Education Officer
Impala District

Respected Sir,

My medical bills have not been reimbursed so far. I have reminded several times the accounts office. Since my family members are suffering from health problems I need financial help. I shall appreciate your telling the accounts officer to pass my bills and reimburse the amount.

Thanking you,

Yours faithfully,

Sd/-
Drawing Teacher
Anupsagar School

Item 4

To
The DEO
Impala

Respected Sir,

I need to go to my native village to settle some land disputes. I request you to grant me earned leave for ten days starting from 20 December 1980.

Thanking you,

Yours faithfully,

sd/-
Accounts Officer
District Education Office
Impala

Item 5

Jalanur
30 November 1980

To
District Education Officer
Impala District

Through: Proper channel

Subject: Request for transfer to Punsufgad

Dear Sir,

My father has been suffering from T.B. He is very old and he needs attention. Doctors have advised him not to work any more. I come from Punsufgad and my father is staying there. I understand that you plan to upgrade the primary school at Punsufgad to/a High School. include/ I shall be thankful to you if you kindly transfer me to Punsufgad, as soon as it is upgraded, to enable me to attend to my old parents.

Thanking you,

Yours faithfully,

Sd/-
Bandhu Ram
Science Teacher
Jalanur High School

Forwarded with request that alternative arrangements should be made before Mr. Bandhu Ram is transferred.

Sd/-
Headmaster
Jalanur High School

Item 6

Panchayat Smithi
Punsufgad

5 November 1980

To
District Education Officer
Impala District

Honorable District Education Officer Sir,

You promised us last year when you came to inspect this school that you would upgrade this school. On your advice for constructing buildings the local council of this village has been able to raise funds to amount Rs. 40,000. We understand from our Member of the Legislative Assemby that the state government has decided to upgrade 400 schools. We have been told by our MLA that if you recommend our school can be upgraded. We hope you will be kind enough to take action in the matter and inform us soon. Expecting that this school will be upgraded we are planning not to send our children to Mongapur, the nearest high school which is eight miles from our village.

We will be most thankful to you for this favour.

Yours faithfully,

Villagers and the
President of
Punsufgad Village
Council

Item 7

Bandariya

25 November 1980

District Officer
Education Department
Impala

Respectable District Officer,

I am writing this letter to let you know how the high school in this village is being run. The headmaster does not live in this village. He comes by bus and is always late. Six of the nine teachers also come from town everyday. Children learn nothing in the classes. There is no teaching as teachers play cards on the school premises. The teachers living in our village get drunk. One of them beats his wife. We the villagers feel that our children are not getting any good education. One of your teachers is canvassing for village elections. He has no time to teach. We request you to visit this school, warn the headmaster and his staff and control their behaviour. Otherwise the education will be of no use to us.

Yours, respected parent

Shanta Pratap

Item 8

Mahanagar

6 December 1980

To
The DEO
Impala

Dear Sir,

Our mathematics teacher Mr. Joseph met with an accident. He has to stay in the hospital for the next three months. As there are only three months left for examinations and we are already behind schedule for teaching, I shall appreciate your posting a mathematics teacher immediately to this school. If it is not possible, you may at least post a science teacher so that our science teacher can teach mathematics.

Yours faithfully,

Sd/-
Headmaster
Manager

Item 9

Ratnagiri

7 December 1980

To
The DEO
Impala

Dear Sir,

Due to the rains in September a portion of our school building collapsed. I had written to you two months ago, but have received no reply so far. We are holding two classes under a tree. The villagers are not willing to construct rooms any more as they raised donations just two years ago for this school. I shall be highly thankful to you if you can make arrangements to reconstruct the rooms.

Yours faithfully,
Sd/-
Headmaster
Primary School
Ratnagiri

Item 10

Sir, in case you come to office I wish to inform you of the following:

Shekhar

1. There was a phone call from the Director of education on 12. He wanted that your proposals for the District education budget for next year should be sent immediately. We have not yet received school plans from 23 schools to complete our budget preparation.
2. The District collector is calling a meeting of all District officials on 21 of this month to discuss the family planning programmes in the district.
3. There was a call from the Director, Girls' Education. This was a reminder asking for this year's enrolment figures in first standard for girls and boys, and dropouts from various classes. We have not received from two of the schools of the south zone the dropout figures.
4. The headmaster of Toland school asked me to remind you about their annual day celebrations on 29 December. He requests you to send your speech at least two days in advance.

Item 11

Jotala

2 December 1980

Respected Sir,

We are holding interschool sports competitions for our zone starting from 2 January to 6 January 1981. This year all 15 schools are participating. We request you grace the occasion by inaugurating the sports on 2 January. If it is not convenient we request you to be our chief guest on 6 January, function and distribute prizes. On receiving your reply we will arrange accordingly to receive you. We hope you will not disappoint us.

Yours faithfully,

Sd/-
Headmaster
Jotala High School
Convener, Interschool
Committee

Item 12

Director of Education
Headquarters

10 December 1980

Dear Mr. Hasan,

When you are on tour to the Southern zone, please enquire from Pavanpur school about the details of the property lost in the fire accident of that school and send a report to me.

Yours sincerely,

Sd/-
Director

Item 13

Directorate of Education
Headquarters

9 December 1980

Dear Mr. Hasan,

We have not yet received the annual budget proposal from your district. Please expedite the same as the state plans are getting delayed. In case some schools do not send the budget plans it is suggested that you may make estimates on the basis of previous plans.

Yours sincerely,

Sd/-
Director

Item 14

Sidhpur High School
Sidhpur

12 December 1980

To
The DEO
Impala District

Dear Sir,

My request for transfer from this place to Mahanagar was turned down last year on the plea that there are no vacancies there. I understand that the mathematics teacher there is on a long leave and intends to get transferred to his native place. I request you to post me there in his place. Since I have already spent eight years in this place, I hope that you will be kind enough to send me to Mahanagar.

Thanking you,

Yours faithfully,

Sd/-
Mathematics teacher

Item 15

Simpur

10 December 1980

Sir,

Three teachers in my schooi, Mr. Abdul, Mr. Sam and Mr. Nath, have been misbehaving. They do not come on time, neglect their classes, and do not obey my orders. I have warned them several times. I request you to immediately transfer them from my school, so that the school can function well.

Yours faithfully,

Headmaster
Simpur High School

Item 16

11 December 1980

To : All District Education Officers

From : Director of Education

Subject: Innovative practices in supervision

A meeting of all the DEOs will be held on 10 January. We want some ideas to introduce some new practices in supervision of schools. We expect to receive at least three ideas about innovation in the supervisory practices in the districts from each DEO. Please send your ideas so as to reach this office before the end of the current year.

Item 17

(Note from your secretary)

There was a telephone call from the District collector informing us that there has been unexpected heavy rain and consequent heavy floods; floods, in the three villages in the eastern part of the district. He wanted you to immediately visit them and request the headmasters to mobilize the teachers and students to help the flood victims. He has also requested that the school buildings be allowed to be used to house the people whose houses have been flooded.

Item 18

To : All District education officers

From : Director of education

Subject: Awards to headmasters

It has been decided to award ten best headmasters of the state. Each DEO may please recommend to this office names of three headmasters, and specify five criteria used in selecting the headmasters for recommendations for rewards. The names and criteria must reach this office before 31 December 1980.

Item 19

From : Director of adult education

To : All District education officers

Subject: Non-formal education

We have received grant for financing four non-formal education centres in each district. We would like to involve the headmasters and teachers in this work. Please recommend to us names of four headmasters who are interested in such work, and who can devote some time and inspire their teachers to participate in this important activity. A small amount of allowance (extra salary) will be offered to those who undertake this responsibility. We plan to start the centres from 1 February 1981. Please send your recommendations by the end of January 1981.

Item 20

From : Director of education

To : All District education officers

Subject: Additional grant of Rs. 50,000

A special grant of Rs. 50,000 will be given to one district which sends the best proposals of utilizing this grant. All DEOs may please send their proposal by the middle of January 1981 so that we can select one district for the special grant. This may please be treated as urgent.

Chapter Thirteen

CASE METHOD

Case method was first used in law. Since then case method has been increasingly used in teaching, mainly in law, medicine, management and social work. Many management institutes and university departments in Asia extensively use this method.

Managers or administrators are required to take decisions in complex situations. Training in decision making skills is, therefore, important for managers. Decision-making skills can be improved by increasing analytical ability, diagnostic skills, anticipatory abilities and skills of system development. Case method is the most suited one for developing these capabilities in managers.

In case method actual situations from organizational life are taken and presented to the participants for analysis and learning. The situation may present details of how a management technique was used successfully to solve problems in an organization, or it may be a problem situation requiring decision to be taken by somebody in relation to an issue etc. Data are made available for participants to discuss and analyze the situation. The case itself presents the data. Sometimes the data may be incomplete, as it happens in real life situations, where managers have to take decisions on the basis of limited available data.

Sometime the data required may not be made directly available, but the participants with some skill in analysis may be able to generate new data from the information already provided in the case. Conflict situations may be depicted for analysis or examination of possibilities like how such a conflict could have been avoided, what could be done to resolve the conflict etc. Sometimes institutions that are running well are described from different angles and the participants may be required to analyze and find out the reasons for the institutional effectiveness.

Advantages of case method

Case method has several advantages. It generates a high level of involvement of participants. Case method requires prior preparation of the case for the class discussion. In the class through systematic questioning the case leader helps the participants to analyze the case situation. The participants contribute collectively to the analysis of the case, understanding of the situation, and generating alternatives. Thus in the class the participants have to be active. People have

different points of view and these should be presented in case discussion.

Another advantage of the case method is that it brings the reality into the classroom. Participants learn more when the learning situation is closer to work life situations. By bringing in real life examples, the participants gain relevant experiences and transfer of learning to their own work situations is thereby facilitated.

Case method is particularly useful for developing problem solving and decision-making skills. Since different points of view are presented in the case discussion, participants get opportunity to look at a given problem or issue from different angles and generate various alternatives. Such wide exposure increases the participants rapture of learning experiences.

How to write a case?

Developing a case takes time and effort. The first step is to identify the areas or topics for which case method could be used for teaching. These areas or topics can be taken from the curriculum developed for a given group. It should be decided which topics could be taught by case method.

Then incidents or situations that may have some potential as cases should be identified. Clues for these incidents or situation may be available from various sources, e.g. newspaper articles, journal articles describing innovations or practices followed in different institutions, districts, regions or countries;experiences narrated by participants in the training programmes; annual reports; reports of surveys, etc. Special case preparation workshops can be conducted in which people with related experience (experienced educational administrators or trainers) can be invited for writing cases. Initial briefing may be done in the workshop. Teaching about the case method may be followed by actual case preparation by the participants.

The following steps are involved in writing a case.

1. Collecting case leads.

2. Selecting a potential lead for further work.

3. Data collection. The case writer should collect as much data as possible on the case. He may interview people involved, he may look at the factual data and record the same, he may collect notes, circulars, and other documents relating to the situation, he may use questionnaires to get views etc. The attempt here is to get as much as possible about the situation - Past, present and future implication. He may collect data on the situation as it exists at the point of data collection or at a point on which the case writer wants to focus the various events that led upto that situation, various view points or reactions expressed by the people involved etc.

4. Selecting relevant data and information. The case writer is likely to be tempted to include all kinds of information, since information is likely to be seen as useful and interesting. When a case is

loaded with unnecessary information it may confuse readers and it may distract them from the central plot or learning experience. The case writer has to examine each piece of information and its utility, and then decide whether to include it in the case or not. If some more information is required it can be added after the trial of the case.

5. Organizing information into a case. The case has to be written up, putting the various information selected. The sequencing of the information may be examined.

6. Try out. A case may be tried out in a group of participants for whom it is meant. The trainer is likely to get some new insights into the case.

7. Finalization of the case. On the basis of the trial run the trainer may reorganize, edit, modify, add or delete the information he presented in the case.

8. Obtaining clearance from the organization. It is ethical for case writer to send a copy of the case he prepared to the source of the case, get their comments and permission to use the case for teaching. Some people involved may not like their identities to be revealed in the case. The identities should be disguised if requested; fictitious names can be assigned. However, the value of the case increases when the identities are retained.

9. Preparation of support material. When cases are used it is advisable to prepare support material for the case. The support material may be in the form of a teaching note, a review article or any other forms of reading that discusses the theoretical or scientific dimensions of the issue presented by the case. For example, if the case deals with conflict resolution, it may be supplemented by a note on conflict resolution. Similarly if it is on institutional planning, there may be a note on techniques of institutional planning or if the case is on managing change in education there could be a write up on the topic. Besides a teaching note it is also useful for the case writer to prepare a note on the case itself describing how to use it. This note may describe the purpose of the case, how it can be handled, what kind of issues may be focussed in class, some data about typical classroom responses, and a summary of the points to be highlighted in the class.

Case discussion

The learning value of a case depends to a great extent on an effective handling of the case discussion by the case leader. Enough time should be given to the participants to read the case. Time required for case discussion may depend on the nature of the case. Normally, the discussion period may range from 60 to 90 minutes. The case leader should focus the discussion on the issues he wants the participants to look at by asking the right type of questions. In most problem solving cases a considerable amount of time is spent in diagnosing the problem. Questions like the following can be raised for this purpose: What is the problem? Is that the problem? Is that the only problem? Why do you think this has happened? How do you see the situation? What do you think has contributed to this? Different points

of view may be elicited and recorded on the black board.

The process of analysis and sharing of different points of view expressed may themselves become learning experiences. If the case deals with a managerial problem and if it is intended to help participants develop diagnostic skills the discussion may focus on identifying symptoms, identifying sources for the symptoms, generating alternative solutions to the problem, and evaluating each of the solutions. If the case is meant for demonstrating a theory or a system in operation, the discussion may start with an outline of the principles or components involved in a system. Then through questionning the instructor can help the participants examine the operation of the system in detail.

In case method the instructor is a catalyst. He avoids "giving" "correct answers" or "solutions". He creates an atmosphere where the participants 'discover' for themselves the knowledge, and solutions. He acts as an initiator of the discussion, monitors the discussion and summarizes the learning points. While monitoring he ensures participation by most and a thorough analysis of the situation.

Variations

Fabricated cases: Generally case materials are prepared from actual situations. However, it is possible to construct events and present cases for analysis. The events may be constructed to present dramatically problem situations. Fabricated cases may be written from general experience. However, these often may present a simplistic versions of reality. Another disadvantage of fabricated cases is their lack of credibility, a feeling of fictitiousness. The participants may take themselves seriously and may dismiss them as artificial situations.

Audio-visual presentation of recorded cases: It is possible to prepare case based films for discussion. These films may be properly edited to give dramatized presentation of events, interviews and situations. Instead of films, video-tapes and audio-tapes can be prepared. These presentations may bring a little more reality to the classroom if parts of them are used to supplement written cases.

Live cases: In live cases the participants are presented with data about actual ongoing situations. The live cases are continuously updated. Such cases could be designed into parts. After each part a decision situation may be presented and the participants may be asked to analyze the situation and take decision in groups. After a decision is presented by each group, the consequences analyzed further and what actually happened in the decision situation is presented to the group. Them they are given further information and again required to take decision. Below is an example based on the experiences of a team of faculty members of the Indian Institute of Management, Ahmedabad.

A team of educational administrators of the State of Rajasthan, India, set out to identify the reasons for school dropouts and make changes in educational systems of the state to attract more students to rural schools. The team interviewed various educational planners and administrators, local officials at village, block and district levels,

various development agents and rural masses. The data indicated the irrelevance of the existing school curriculum and the disappointment of the people with school systems.

There was a need to change the orientations of teachers, headmasters, district level education officers, curriculum experts and other agents to education in rural areas. The team concluded that if schools have to attract students and motivate parents to send their children to schools, the school curriculum should be localized, should help in increasing their earnings, should be functional and should help them use the resources around them. The team set out to experiment in a block (about 75,000 population and over 100 villages). They went round the villages generating participation of villagers in identifying resources that could be used, and economic activities that could be generated. They identified resources like sheep, weaving talents, leather work etc. They also identified new economic activities, mobilized development agencies like banks. They also brought institutions interested in providing technical training to villagers in the new economic activities.

All the above details and actual experiences of the team are presented in a case form. The case narration stops at critical points. The participants are asked to decide the next step they would take. For example, the initial survey data, including results of interviews with villagers, village leaders, teachers, headmasters, block development officers etc. are presented. In the context of this information the participants are asked to decide what next step they would take as educational planners or administrators. Their answers are discussed in the class followed by another presentation (distribution of next part's case material) of the events that followed (the experiences of the team). In this way the case goes on in parts.

This case was used in training rural development managers and other educational administrators.

Role play cases. Cases can be role played in the classroom. After discussing a part of the case, the situation becomes clear, and several alternative actions may be available. Instead of discussing the implications of actions to be taken, the participants can be divided into small groups, and can spend some time in role playing the case. They may then bring their role play experiences to the classroom to share the consequences of various alternatives tried out and learn from "live" experiences.

Role playing could also be used in case method immediately after participants read the case and without any discussion. This provides an opportunity for the participants to act out and analyze the dynamics involved in the case.

An example of a case

A wide range of strategies could be used in the case method. The following is a summary version of a case in India for teaching education management. Description of this case is followed by a brief description of how that case is handled, in what situations the case can be used and how the case discussion can lead to a meaningful learning experience.

Appendix 13.1

Bidi tobacco research station:

This case presents the details of how a Bidi tobacco research station, which is a part of an Agricultural university is managed. The case starts with the impact of the station on cultivation of tobacco in Gujarat state in India, over a period of about 20 years. The data on per hectre yield of tobacco, total amount of tobacco produced in Gujarat state and other states are presented. The history of the station which is over 35 years old is briefly presented. A profile of the Director of the station (designated as project co-ordinator) is also presented.

The profile of the director includes his achievements in his profession, his achievements as a manger of that station, his style of working, his contribution to the university and his leadership qualities as reflected in a through a farm commercialization programme run. His beliefs about staff, perceptions of his role, time spent in different activities are also presented.

This is followed by brief descriptions of each of the heads of departments present in the station (Plant, Pathology, Nematology, Chemistry, Statistics, Genetics etc.). Their image of the station, their beliefs about people who work in the station, their styles of functioning etc. are briefly presented. This is followed by a description of the comments made by a number of junior staff about the station and its leadership, when the case writer met them in groups are presented. Some of the comments indicate dissatisfaction of the junior staff with some aspects of the research station.

Thus this case is a description of the research station, profiles of its managers, their perceptions, organizational culture and reactions of the junior staff to it.

This case can be used to

a) discuss leadership styles, the need for maintaining good organizational health and the mechanisms for developing an academic atmosphere in a research institution,

b) analyze mechanisms of generating interdepartmental collaboration or interdisciplinary work in research settings, and

c) analyze the mechanisms of human resources development in educational settings. While discussing the case, the case leader gets the participants to first decide

whether the Bidi tobacco research station can be considered as effective or not.

There is generally an agreement that it is an effectively managed station. However, some participants pick up the negative side and highlight it. In any case, the instructor lists down on the black board the various indicators of the station's effectiveness. The factual data in the case about tobacco production give some indication of the station's achievements. However, participants list a number of other indicators like the informal atmosphere, personal example of its head, encouragement given to junior staff, contacts maintained with farmers, facilities for development etc. This discussion itself is likely to help the participants understand the different measures of effectiveness of an academic institution. This is followed by an analysis of the factors that contributed to the effectiveness of the station.

Chapter Fourteen

ROLE PLAYING

Role playing is useful mainly for training people to explore the personal and interpersonal dynamics in organizational life. It is a good tool mainly for human relations training which is an important component in training education managers.

The technique and process of role playing

Role playing is an old method adopted by children to learn new social roles. Children may often be seen acting as partents or other adults. This kind of play activity is a good learning device for children. However, this has been developed into a new technique for use with both children and adults.

Role playing is a method of adopting roles from real life, other than those being played by the person concerned, and understanding the dynamics of those roles. It is "a method of studying the nature of certain role by acting out its concrete details in a contrived situation that permits of better and more objective observation". Role playing is a conscious attempt to examine the various roles played in actual life.

Role playing developed as a result of new development in interpersonal techniques started by Moreno. Later this technique was adapted for its use in various situations in interpersonal relations like education, administration, industry, social work, therapy, etc.

Various paralleled names have been used for role playing like leadership, training, reality practice, experience practice, spontaneity training etc. However, the term role playing is the most accepted because it is more expressive. The technique of role playing can be adopted for various purposes and the nature of the technique would differ for different purposes.

While planning role playing one important factor to be considered is that of establishing rapport with the audience. The role players should clearly understand the purpose of role playing and should be agreeable to play the roles.

Considerable skill is required in the selection of a situation for a role play session. The situation should be challenging. It should concern those who are participating in role playing. For this purpose a conflict situation may prove better, but it should not involve areas of personal conflict.

Equally important is the technique of role briefing. Those who

are to play roles should understand clearly the type of persons they are required to be during the role play session. It is better to prepare written briefing sheets and distribute them to the persons concerned. In a group role playing situation, the whole group need be briefed regarding the general situation and group atmosphere. The individuals in the group situation should be briefed separtely. Briefing should concern only emotional states and attitudes and should not contain details about the type of things the role player should say during the role play session.

For good role playing the role players should get involved in the situation. This would depend much on the type of briefing. Involvement is necessary to make the role play session as near to reality as possible.

The role of the role play director is also important. He should see that role playing proceedings are according to the briefing. During the role play session he observes the progress of role playing and cuts the role play whenever he feels that it is not proceeding properly and is not fulfilling the purpose for which it is arranged. He can also cut the role play to explain the dynamics behind a particular statement. During the role play he can also interview the role players to show the observers how various persons have been feeling.

Sometimes role play is done by one or more so that one expert can demonstrate principles and practices. In this case the person may be in the role for sometime and then may come out of the role to explain the dynamics behind the role being played. It is useful to develop this practice of stepping out of the role by role players to explain to the observers the relevant feeling they would like to report.

The final analysis of role playing is of great importance. After the role play session is over, it should be thoroughly discussed. For this purpose it is necessary to do some audience briefing in the beginning. The observers may be asked to observe the dynamics of the group engaged in role playing, with the help of an observation sheet or form. Guided observation during the role play session helps in making the purpose of role play clear.

At the end of the role play session, the role play director and the observers may interview the various role players to know the dynamics behind the role play interrelationships. It is sometimes useful to use an alter ego -- one of the observers who may identify himself with one of the role players — to report to the observers the feelings of that players to see the difference between the reporting of the feelings by two persons. After analysis and evaluation of this type the role play session may be concluded.

Some uses of role playing

In addition to the validity of role playing from the point of view of the general psychology of learning, role playing has a number of other advantages for human relations training. In the first place, it is a simple procedure and does not require the use of costly and

elaborate equipment. It involves dealing directly with problems in human relations rather than just talking and intellectualizing about them. Role playing makes possible a minimum of distortion of real life situations and at the same time makes it possible to focus and magnify the situation so that it catches the attention of both role players and observers. Through role playing it is often possible to condense within a few minutes what in real life might take a long time.

Role playing is advantageous in that it cushions the individuals from the kind of emotional shock that accompanies "real life" feedback of the effects of awkward and inappropriate human relations behaviour. In a role-play situation the person is able to accept this feedback with less threat to his ego and hence less defensiveness. A final advantage in role playing as a technique for human relations training is that it makes possible a kind of panoramic view which is often not available in reality. In a real life situation only one aspect or a couple of aspects are visible in operation and the observer may be baffled in his attempts to understand because of the necessary isolation of these aspects from the totality.

Role playing is being put to various uses in human relations training. The following uses are suggested:

1. <u>As a training technique</u>

When we think of training we usually think of developing skills. In human relations at least two somewhat different kinds of skills are involved, those of observing and perceiving and those of doing and executing. Role playing provides, opportunities for developing both. Some of the ways in which this can be done are suggested as follows:

a) Developing skills in perceiving another person's feelings. When we come in contact with an individual we generally know him primarily through the words he uses. The feelings behind the words are not often made explicit and even more rarely are detected. It requires great skill to perceive and understand the feelings of other persons either not expressed or only implied by the words they use. During the analysis of role playing trainees practise assessing the various feelings and their relationship to the different types of expressions and this is done under circumstances that make it possible to get some appraisal from the role players of the adequacy of the assessment.

b) Developing skill in permissiveness. Permissiveness in human relations situations makes it possible for ideas and feelings to be expressed and hence takes into account decision making. Wanting to be permissive, however, and being able to act so as to create a permissive atmosphere are two different things. One may desire, for example, as a teacher to build a permissive classroom climate so that pupils are encouraged to experiment with their ideas but these good intentions are not enough. Permissiveness is a

skill that needs to be practised and such a practice is facilitated by role playing.

c) Developing skills in leadership and group work. In a face-to-face working group, each member contributes to making progress in the group task as well as to the maintenance of the group morale. The extent to which each member makes these contributions, however, is a function of his group membership and leadership skills. An effective member of a working group will deal more successfully with a person who is adamant, with one who is shy, with one who is disposed to win an argument rather than contribute to group decision, with one who is hostile and has consequently an antagonistic attitude, and so on. Role playing provides an opportunity to practise and analyze the effect of different ways of dealing with such situations which are common to group work.

d) Training in role flexibility. An effective working group is one whose members illustrate what might be called "role flexibility". In other words, they are also to do what needs to be done for the group to get on with its job. A particular group member may sometimes play the role of clarifiers at other moments he provides a needed summary, and later gives deserved recognition to another member of the group. The maturity and effectiveness of a group is in part a function of the extent to which the various members are flexible in respect to the roles they are able to fulfil.

2. As an evaluation technique

The insight into the various processes of human relations and the ability to assess them properly are difficult to acquire. The development of such insight, however, facilitates individual or group change and role playing as a training method can be useful to achieve this goal.

a) Helping self-assessment. The individual is likely to overlook the various weaknesses in his interpersonal behaviour. After getting into the various roles he may be able to develop an insight in his own behaviour and may be able to assess himself in a more objective way.

b) Discovering attitudes. In a role play situation, it is easy to discover attitudes of individuals. Later on appropriate roles may be assigned to them so that they see the attitudes of others and are able to appreciate them.

c) Assessing knowledge and attitudes. Role playing can be used in a classroom situation in higher education for evaluating knowledge and attitudes of students in the field of social science. Written or oral examination may not be able to provide a dynamic situation revealing the various aspects of the assessment of knowledge and attitudes.

3. As a technique of effecting change

The ultimate aim of training in human relations is to effect desirable changes in the relationship patterns of the members of a group and to facilitate these changes. Role playing can bring about changes in the following ways:

a) Facilitating internalization of learning. There is often a gap between what we believe and what we do. We may be convinced of a particular principle and practice but in our actual doing we may not follow it. There are two reasons for this wide gap between belief and action. We may lack skill and practice with the result that we may not be able to put into action what we believe. Secondly, we may lack the skill of relating a situation to the principle we believe. Both these drawbacks can be remedied through provision of techniques requiring repeated application. It helps in the internalization of principles that usually remain at the verbal level.

b) Changing attitudes towards other people. Improvement in human relations can be brought about through a change in attitudes. We develop attitudes towards other people and fail to change them in a desirable direction. It is necessary to realize that the attitudes we have impede the development of better human relations. This can be done through change in attitudes. If during the role-play session and at the stage of discussing the various aspects of the role-play, it is demonstrated that hostility, suspecion, impatience and other negative attitudes bring about the same type of response, better insight into relations may develop and the attitudes we may hold towards other persons may be changed. This may also happen when one is at the receiving end of such behaviour. Attitudes also change as a result of expression of the pent up attitudes.

c) Changing attitudes towards oneself. One human weakness is that we recommend things for others but exempt ourselves from those considerations. This is very detrimental to the development of effective programmes. It is necessary to show that the principles which we think are useful for others should apply equally to one's own self. This change of attitude towards one's own self can be brought about through role playing.

d) Changing attitudes towards work. We always tend to carry over the attitudes we have developed towards a particular type of work as a result of our perception of the work, to the job when we take it up. The teacher perceives the job of a headmaster as carrying authority. When he becomes a headmaster he is likely to continue in the same perception and use power and authority with the result that human relations in the institutions may suffer. For improving

human relations it is necessary to change such attitudes towards work. Through role-play sessions this can be achieved without much difficulty.

e) Developing action tendencies. The greatest use of role playing is that it carries the training into action. Role play stimulates pupils to start practising things which become evident as useful during the role-play sessions. Change in attitudes and value systems alone do not mean anything unless these are put into action. When the resistance is greatly reduced through role-play sessions and motivation is provided, action tendencies begin to develop.

Some role play procedures: Role playing is being increasingly used for human training. Various forms of role playing are being developed for this purposes. The main requirement in role playing is one of assuming roles and playing them out. The following are some of the methods adopted in this connection. The utility of a procedure would depend on the purposes for which role playing is to be arranged and type of audience.

Simple role playing: The usual method adopted may be called simple role playing or what is called "Single group role playing". In this procedure one role playing group performs and all others act as observers. The role play can be cut by the role play director whenever there is a need of explaining the dynamics to the audience. This procedure is quite useful for the purpose of demonstrations, for developing skills in sensitivity to the feelings or others by providing the chance to the alter-ego to view the differences in the perception of feelings by the role player and alter-ego.

There are many advantages in the single group role playing. First, it helps in the training of observation, as all the persons present in the role play contribute to the observation of the session in progress. The various aspects of the role play session are observed by the different persons. Secondly, it helps in training in the analysis of behaviour. Various observers present in the group try to find out the reasons of things said and done and the dynamics behind the behaviour of the different roles.

Thirdly, the advantage of the feedback are more effectively available to the role players and this helps in developing their insight into the behaviour they have been role playing. The feedback is more effective since it comes from various observers. And lastly, there is better training in sensitivity to feelings. This is specially so when an alter-ego is used for the role-play situation.

Multiple role playing: When the purpose of role playing is to involve all the persons present in the group, multiple-role playing proceudre can be adopted. In this procedure, the audience are formed into convenient role-playing groups and the various groups role play simultaneously. A good procedure to divide the audience into groups is to have two or three persons sitting in the odd rows to turn and face

two or three others in the even rows which would make a small group. Written instructions are distributed and the various small groups start role playing on the same problem. After a specified time the role play is terminated and discussion is taken up. It is always useful to have process observers in every smaller group.

The method of Multiple role playing has its own advantages. First, every member in the group gets practice in role playing. Secondly, the solutions arrived at by different groups can be discussed and compared with one another and useful conclusions can be drawn. Thirdly, multiple role playing is good for studying the process of group interaction. When process observers are working with the various groups, their reports of the interaction processes are very helpful in developing insight in the participants. Although the same roles are being played by the various groups, the differences due to personality and group factors produce differences in approach.

Audience role playing: In this procedure the audience are made sensitive through the use of specially prepared situation and then are required to react to a change in the situation. Some details of a situation are read before the audience so that they are attuned to a particular emotional attitude. Later on new experiences are introduced and the reactions of the members of the group are noted through specially prepared forms. The behavioural changes are measured in the artificial situation of attitude change. This kind of role playing is useful in finding out effective ways of changing attitudes.

Skit completion method: The procedures of role playing discussed above can be used in a variety of ways. It may sometimes be necessary to gear role-play sessions directly to the conflict problem. For this purpose it may be necessary to cut out preliminary parts of the role play and to introduce the problem direct for the purpose of role playing. To accomplish this, a skit is often presented before the audience and they are required to observe it. When the point of problem conflict is reached, it is left and the role-play session starts. Skit completion method is meant to carry development to a situation of a specific conflict area which becomes the starting point for role playing.

Dramatized case method: A similar procedure is to present a dramatized version on the basis of written dialouges of a situation and then to introduce the role-playing at the point where conflict climax reaches.

A lecture can be stopped in the middle and the problem can be introduced for role playing. Or, a panel can be given a problem with details of a situation and the roles, and the panel members can be asked to assume specific roles during the panel meeting. A clarifier is required to interpret the process and the progress of the discussion to the audience. The idea and basic process of role playing can be tailored to the needs of specific groups.

Steps in developing a role play

Applications of role play technique are limited only to certain areas of training, mainly in behavioural dimensions. The following steps may generally be followed in writing role plays.

1. Define the objective of the training or the nature of the skill that is attempted to be developed.
2. Identify a general problem area where the skill needs to be applied.
3. Collect data, facts or case studies of a few such situations.
4. Write role briefs on the basis of one such situation or using generalized experience of the cases.
5. Decide the manner in which role briefs are to be presented.
6. Try out the role play.
7. Edit and finalize on the basis of the trial.

The following areas are more amenable for using this method of instruction:

1. Counselling.
2. Conflict management.
3. Performance review of faculty and other staff.
4. Delegation and co-ordination.
5. Leadership and team building.
6. Group problem solving.
7. Developing instructional capabilities.
8. Verbal and non-verbal communication.
9. Interpersonal relations.
10. Personal growth and development.
11. Value clarification exercises.
12. Decision-making vs. attitude change.
13. Motivating staff.
14. Supervisory styles.

Appendix 14.1

REGIONAL EDUCATION OFFICER

The situation: This role play situation deals with a Regional education officer trying to get the involvement of his headmasters to start a new educational activity in his region. The region has five high schools and 30 primary schools all spread over 150 square miles. The region used to have forest a few decades ago. However, the forest disappeared as people cut the trees and used them up. There are very few trees and eventually the area had grown into a barren area. The area was also being hit by drought for the last few years. One of the reasons attributed for this was cutting out of the trees.

The education officer of this region was persuaded by a group of experts to start an afforestation programme using the existing school systems. However, the programme is not likely to succeed if the co-operation of the headmasters is not available. The headmasters may not co-operate as it is not a part of the main stream of his activities. The situation is designed for the Regional education officer and the headmasters to interact and it helps to develop skills of generating participation in decision-making and selling of innovations.

Role-players: This role-play situation requires a Regional education officer and a group of not less than ten headmaster role players. All the audience may be asked to play the headmaster roles. The following role briefing sheets may be distributed to the respective role players.

Role briefing for REO: You are the REO of this region. You have been in this region for the last five years. This region has five high schools and 30 primary schools. In every school there are at least a 100 students. This region was drought hit for the last ten years. You heard that this region used to be a big forest decades ago. People have cut off the trees. Now it is all barren land with very little greenery. The sight of trees is rare. With more and more awareness of politicians, people of higher authorities, increasing pressures are being put on the education system to cater to the needs of people.

The education system so far has been rigid with rigid curriculum and time tables and very little time and scope is left for schools to do innovative things. In a recent meeting by a group of experts from the federal government it was suggested that your region should start an aforestation programme. You heard that some attempt was made by somebody a few years ago to plant a few trees but nothing grew. The forest

department agreed to supply to all schools a new breed of plants which are likely to grow well in the region with little water consumption. However, once the plants are planted they need to be looked after till they grow for a year or so. The students are the only ones who can participate and make this programme a success. So you are set to convince the headmasters to participate in this programme. If they do not co-operate the trees may never come up; they may just plant the plants and leave. It needs involvement and time. You have called a meeting of all your headmasters to discuss and work out a plan. You have no authority to change the school timings or make any changes in the syllabus.

Role briefing for the headmasters: You have been summoned by your REO for a meeting. Apparently he has some new ideas. Nowadays there is no dearth of ideas. Everyone talks of community participation, development, and relevance in education. However, no one is willing to change the existing systems. On one hand parents accuse the schools for teaching irrelevant things and on the other hand they feel upset if any changes are made. You are having a hard time with a busy school schedule and having to manage teachers and students. New ideas mean more work and generally there are no incentives. You do not want any new work to be undertaken. However, you may change your mind if the idea is highly appealing and does not involve extra work.

Conducting the role-play: In this role-play five to ten minutes time may be given for role-players to prepare for their roles. They may decide on the strategies and attitudes they want to adopt. This is followed by about 20 minutes of actual role-play. The transactions may be videotaped or audiotaped. Then there may be about an hour's discussion. The discussion may focus on the skills of the REO to 'sell' the new activity, his interpersonal sensitiveness, strategies used, leadership capability, ability to answer questions etc. The transactions may bring out many new dimensions involved in educational change.

If time permits another participant from the audience could be requested to play the role of REO for a second round. His performance could also be analysed, including strategies used and qualities exhibited.

Chapter Fifteen

FIELD TRAINING

One limitation of training is that it produces a distance between the learning experience and work reality and work situation. Training in one sense is artificiality and removes the learning situation far away from the work reality. This has its own advantages, but this also has some limitations. Attempts have been made to ensure that training is related to work reality, and there is minimum distance between a learning situation and what happens in the work or on the job. The method which comes closest to work reality is on-the-job training. However, field training is another method which removes training away from work reality only by one step, and, therefore, is closest to it.

Field training may take several forms. It can vary in its rigour and demand on the trainees. It may be a part of a longer training strategy or programme, requiring the participants to have direct work experience or orientation towards work reality. Or, it may take the form of less rigorous undertaking. The latter may be in the form of study tours, visits to other areas, countries or regions, or general visits to places for discussing certain problems. When it is done as a rigorous training activity, it may either take the form of specially focused surveys and studies done by an individual or a group of persons, or it may be a part of a longer training programme.

Whatever the form, field training requires much more attention than has been give in the past. Merely by sending people to a particular field site does not fulfil the requirements of training. Fortunately more and more attention has been given to this method. The Unesco regional office for education in Asia and the Pacific has done a lot to use this method more effectively for the improvement of educational practices.

Purpose of field training

Field training may have several purposes. Some of these are suggested below:

1. To help participants discover learning. Field training may be used to help the participants experience certain things and discover somethings by directly working in the field. Such discovery may be much more striking, and learning may be much more lasting. For example, by going to a decentralized place, where administration is practised in a really decentralized way, the participants may discover for themselves

the conditions under which decentralization succeeds. If participants are sent for field training to a known place for successful implementation of a programme, or a place where a particular programme has run into tremendous difficulties, they themselves may be able to discover various dimensions of the success of a particular programme. Such learning will be much more convincing and lasting.

2. To help participants test some ideas. Before going for field training the participants may learn some theories and may tentatively develop some hypotheses or may have some ideas. Field training may help them to test some of these ideas by collecting data with questionnaires and interviewing people, or by observing certain things with a focused view. Field training becomes effective when the participants have the clear focus of what they would like to study and then they can test some of the hypotheses they have prepared for this purpose.

3. To help the participants practise some skills. Field training may provide very good opportunity to the participants to practise some skills they have learnt. For example, if the participants have learnt how to identify a problem, they can practise their diagnostic skills in a particular field, by asking questions, interviewing people, and holding meetings etc. Similarly, if they have learnt some techniques of identifying potential leaders, or finding out the level of motivation of employees, or studying the organizational climate in a particular organization, they can practise these skills in the field.

4. To help the participants act or solve problems. The training may help the participants to intervene in a situation needing some intervention. This may help to develop the participants' skill of intervening in a situation and study the results produced by their intervention. Every field setting may allow such interventions. If interventions are to be tried out, this may be arranged with the concerned people in advance.

5. To help the participants experiment and innovate. Field training may serve a purpose if it may help the participants not only to specifically learn certain things or test some hypotheses, but also if it allows them to experiment with some ideas and innovate some solutions. One advantage the participants have in field training is that they are outsiders, and do not have prejudices or pre-judgements about certain things prevailing in the field where they go to study. This may help them to look at the things in a different way, and try to find some new solutions for some problems which they observe. If the field settings give such opportunity, the training can be much more effective.

The role of the participant

It is important to determine and discuss in advance what the role of the participants will be in the field training. The role may vary from very passive to a very active one. On the passive side, the participants may be merely observers of certain things. The field training may be used only for demonstration purposes: the participants go to the field to observe certain things and learn these.

On the other hand, the extreme point on the active side may be to make the participants interventionists. They go to the field and act and intervene in the situation. In between these two extremes may the anthropological role, that of participant observers. In this role the participants may both observe what is happening, as well as become a part of the system by participating in certain dimensions. It may be useful to discuss in advance where on the possibility activity continuum the participants will be when they go for field training. It is also useful to clarify this role with the organization where the participants are going for field training.

The role of the trainer

Equally important is to clarify the role of the trainer. The trainer's role should be clarified from the beginning, both to the trainer himself and to the participants. Trainers' role may be clarified for pre-field work, during the field training, and after the field training is over. Certainly the trainers will have definite roles in the pre-field work, and post-field work phases. However, their roles during the field training may be clarified. Will the trainers be available for testing the ideas? Will the trainers hold evening process analysis sessions to discuss the experiences of the participants during the day, not only in the field as observers and as interventionists, but also as teams, and encourage to openly share feelings of working with each? Will the trainer provide help to the participants in analyzing their experiences and data to develop some general understanding about the field situation and some ideas about intervening in such situations? Will trainers help the participants to finalize the reports to be discussed? How much commitments will the trainers have to the stand taken by the participant while they are presenting their reports in the post-field phase? etc.

It may be useful to clarify such questions whether the participants have proper expectations from the trainers. Certainly trainers have to be resourceful. But again the role of the trainer may vary from comparatively passive role as resource people who are available for consultation, to a very active one in which they get more actively involved in all the phase of the field training.

Choosing the field for study

The field for study should be carefully chosen. Several criteria may be kept in mind while choosing the field. The choice of the field should be determined by the training requirements. The following factors may be considered while selecting the field site: availability of ample opportunity for the participants to learn about certain phenomena, the willingness of the people in the field to accept the participants for such study, their willingness to accept the demands of such visits, their eagerness to learn and benefit from such visits, their availability for discussion, and their eagerness and ability to help the participants on various dimensions, accessibility of the field site to the participants, the problem of communication with people in

the field, etc.

Preparation

Enough attention should be paid to pre-field work. This is done in the form of preparation. The preparation should include clarity about the objective of the field training, and about the roles of the participants and the trainers. It should be made clear what is the purpose of field training, and what dimensions will be studied by the participants. The preparation should end up with some kind of contract amongst the various parties between the participants and the trainers, between the participants and the client group in the field, etc. This will help to clarify not only roles these people perform but also the boundaries of their relationships and the expectations each group has from the other groups. It is always useful to have a meeting of some representatives of all the three groups - the participants, the trainers and people from the field.

In the preparation attention may also be paid to the methods adopted and to be used in field training. If data are to be collected not only should the methods to be used be decided, but even the details of the instruments, etc. may be worked out, and it may be ensured that the instruments will have no problems when they are used in the field. Enough attention needs to be given to the preparation of details of collecting data, detailed schedules of interviewing people and details of any other instruments to be used for field work.

Pre-field preparation will include enough information about the field and the problems to be observed. The participants need to have as thorough knowledge about the field and its various aspects as possible. They should be clear about the set-up of education in that particular field, some statistics about education and administration of education, the problems people usually are facing, the number of institutions working in the field, the general pattern of hierarchy of people of an institution in the field, etc.

Pre-field preparation should also focus on some details about what is going to be done and how things are going to be done in the field. A general orientation of the participants may be arranged to the culture, institutions, food and other arrangements, etc. The more such minor matters are clarified, the more the energy will be available for substantial work while people go to the field, so that people are not bothered about such minor irritants.

Field work

The field work is the hub of field training. It is necessary to pay attention to various aspects of field work. It is obvious that the field work will involve working on the problems decided, and using the techniques about which enough preparation has already been made. Besides these, attention may be paid to processing of field work experience which the participants got from people in the field. For example, the mechanisms of processing of data and of experiences and feelings while they work in the field, may be discussed and decided. There may

be daily, or bi-weekly, or weekly meetings in which the participants may share openly their feelings and concerns amongst themselves. Such meetings may help to keep various groups involved in the field training much more dynamic. The various experiences of people may be processed and reviewed during such meetings.

It may also be clarified that while detailed preparation may be made for field work, several changes have to be made from time to time in the procedure followed during the field work. There should be enough scope for adapting to new circumstances. This need should not be taken as lack of thoroughness or lack of preparation. While people may be very well prepared they should also have some flexibility of bringing about necessary changes.

It needs to be clarified to the participants, and communicated to the client group in the field, that strict confidentiality is maintained about the information they collect in the field. Participants may owe such confidentiality to two main groups. If they are interviewing individuals or groups of people, their first commitment of confidentiality is to such individuals and groups. Under no circumstances should the information given by an individual or a group be shared with other individuals or groups by revealing the identity of the respondents. Feedback to the general organization may be given only in general terms. It should be made clear to the administration in the organization that such confidentiality of individual information will be maintained, and that the information will not be revealed regarding who said what.

The second level of confidentiality is with the organization itself. Whatever information is collected from the field is strictly for the purpose of learning. It needs to be made clear that this information will be used for learning, and that it will not be shared in any form without the permission of the organization.

The field work may involve, as we have already said, either observation by the participants of what is going on in the field, or more active participation by the participants by studying the problems and intervening in the system. In some training institutions field work is used as a more active exercise. While it may be made clear that the purpose of field work is to help the participants learn certain things, the effectiveness of field work may be tested by finding out to what extent the participants were able to think on their own, and had new ideas which were not available in the field, and they did not have these ideas before. This may be possible if the field work includes not only the study of a particular aspect, but also some recommendations on other aspects. In this sense field work may both be diagnostic and consultative in nature.

For example, in one institution field work was done by managers cum trainees of small industry. In the beginning there was reluctance by the various industries and other organizations to have the trainees for field work; there was a feeling that a lot of time will be wasted because of field work. However, after some experience when the administrators of these units and organizations realized that the field work

by participants not only provided them enough opportunity to learn new things about their organization, but the recommendations made by the participants on the basis of their field work resulted in improvement in efficiency of the organizations, and in many cases in substantial savings. As a result, not only the units and the organizations welcomed such visits, but made special requests to the institute to send more trainee groups for field work, and they also promised to provide help and hospitality to the participants.

It may be useful for the participants to study the various problems, develop alternative solutions for these problems and work out some detailed action strategies. This can be done if the participants work in small teams, which are not too large, and also when they do not work as isolated individuals.

Post-field work

It is equally important that attention is paid to the processing of the field work after it is over. Several steps are involved in this. The first step is the preparation of a report by the group of participants who did the field work. Such a report should be prepared with great care and enough importance may be given to such report. The group should make the report almost a matter of prestige for it.

The second step is the proper critiquing of the report. For this purpose the reports of various groups may be presented before the entire community consisting of the participants and the faculty. Both the faculty and the participants should be encouraged to do critical review of the reports presented, make comments on them, question several problems or suggestions made and make critical comments on the general structure as well as the recommendations contained in them. Such critiques may be very helpful in improving the quality of the reports. Critiques should be both positive in terms of making suggestions as well as critical in terms of looking for areas of weaknesses.

The third step is in revising the report for official presentation not to a large group, but to a smaller group in which representatives of the client organizations are present. At least one representative from the client organization may be invited to be present while the report is presented. The purpose of this report is to get reaction of the client representative. He may make comments on the usefulness of its recommendation, correctness, and make some observations, mainly on the feasibility of the suggestions made. The representative of the client organization may make some comments and may suggest some changes.

The fourth step is the revision of the report in the light of the discussion with the client organization and sending it to the client organization for necessary information and action if they so desire. The purpose of field work is not to make any consultancy report. However, it may be useful if the report is made as much usable as possible.

And the last and final step in the process is follow up of such reports in order to see which recommendations made by the participants were found useful and led to some improvement in the situation. The follow up of the reports may give new ideas for administrative changes. It may be useful to prepare periodically summary reports of several follow up studies.

Appendix 15.1

Field training experience reaction form

1. Mention below the main points/areas of your learning from your field work.

   a)

   b)

   c)

   d)

2. In your opinion how well was the field training organized? Check one of the four alternatives given for each item.

   a) Planning

      _____ Very well planned.

      _____ Somewhat well planned.

      _____ Not so well planned.

      _____ Not at all planned.

   b) Educational value of the site visited

      _____ Highly educative.

      _____ Somewhat educative.

      _____ Does not have much value.

      _____ Not at all useful.

   c) Response by clients.

      _____ We were well received.

      _____ The clients were somewhat receptive.

      _____ The clients were not receptive at all.

   d) Facilities during trip

      _____ All facilities were made available.

      _____ Some facilities were made available.

      _____ There were very few facilities given to us for this trip.

e) Time allotted

_____ Very insufficient.

_____ Somewhat insufficient.

_____ Adequate.

_____ Overadequate, time wasted.

f) Learning

_____ We learnt a lot.

_____ Learnt a few things.

_____ Learnt nothing out of this.

g) Role of faculty accompanying participants.

_____ Very helpful.

_____ Somewhat helpful.

_____ Faculty could not be of much help.

h) Overall

_____ Should continue.

_____ Could continue with changes.

_____ Should be dropped.

3. Please give below your suggestions for improving the field training in future.

221

Chapter Sixteen

SELF STUDY AND SMALL GROUP WORK

Self-study and group work may not be treated as independant training methods. However, they are used in several methods.

Self-study: Self-study may take several forms. Some of these have been discussed in distance teaching. Self-study may become an integral component of a formal course of studies or a training programme. Self-study may take place outside a formal programme where a learner is expected to study on his own and acquire knowledge and skills. Since the latter part has been covered under distance teaching, only self-study as a part of a formal programme is discussed here.

In self-study the learner is supplied with materials for self-study and is expected to work at his own pace with some broad time limitation imposed on him. Self-study may precede a class lecture or may supplement a class discussion. Self-study may take the form of a project in which the trainee may be given a topic of study and an outline of the reference materials and may be required to prepare position papers on that topic after reviewing literature, or interviewing people.

Many programmes for training managers use project work. This is another self-study mechanism. Project assignments are given generally after a few class-sessions are held and some inputs are given. These inputs are followed by presentation of project study opportunities. The participants then choose the projects individually or in small groups. They are given some free time to work on projects. As stated above such projects may involve library work, review of existing documents and records, developing some new designs, interviewing people etc. In this process a participant is likely to learn many things on his own.

For example, a group of headmasters undergoing training in school management may be supplied with materials on how school systems are managed in different regions of that country or in other countries and may be asked to write a paper on the management of schools and suggestions for future improvement. Similarly educational planners attending a programme can be required to prepare a paper on educational planning strategies and participative methodologies used in other countries.

Advantages and disadvantages: In self-study a participant gets an opportunity to work at his own pace. There is a possibility of his exposure to a variety of experiences through reading. The participant

is actively involved in the learning process. Trainer does not have to pay individual attention to the participants.

The main limitation of self-study is that it can only be used in the acquisition of knowledge and information, and other cognitive objectives. Skills cannot be developed through this method.

The trainer's role: The trainer needs to spend considerable time trying to design self-study experiences and providing self-study materials. The trainer should also provide close guidance for participants periodically during self-study periods. The trainer should have himself gone through at least some of the materials and should be familiar with the field of coverage. The trainer is an active catalyst.

Small group work: Group work can be used in different ways as an aid in training programmes. Group work is generally not used as an independent training method but more as an aid to other method. Group work involves a group of participants (normally 5-8) sitting together and trying to learn about a situation, diagnose a problem, solve a problem, make a decision or perform some kind of a task. The following functions are served by group work.

1. Participants are likely to learn from one another by sharing experiences in small groups.
2. Participants, working in small groups, would have much more opportunities to explore each others' dynamic experiences in depth and learn more. So every participant has an opportunity to pick up experiences that interest him and explore them in depth.
3. A small group motivates the members to be active and contribute opinions and ideas.
4. In problem solving situations collective thinking and self-discovery (or group discovery that inculcates a feeling of self-discovery) are possible.
5. Group work, done in between training sessions using other methods, provides a variety and breaks monotony at the same time offering opportunity for learning.

Group work can be used in the following ways.

Independent group work: Tasks are assigned which are not linked with other sessions in a training programme. The groups meet over a specified period of time, work as a team and accomplish the task.

For example in a training programme of headmasters of public schools in India, one of the objectives set was to help them think of innovative ways in which their school systems can be designed. These headmasters had considerable freedom to change the organizational structure and processes in their own schools. In the training programme in order to help them think in innovative ways, they were divided into groups. The groups were given the following task.

"Imagine that you are a team of experts called by the Education Minister of Alpha Island to start schools there. The Island is full of illiterates and you have been told that your resources are unlimited. Design a model school for that Island giving detailed organizational structure, systems and processes. The group that would present a most innovative design gets a prize".

The groups were given a whole day to work on the design with details. The next day a group of judges were formed choosing one person from each group and each group presented their designs. Each of these designs were critiqued by the rest of the groups. This process exposed them to a number of alternative ways in which school systems can be designed.

Different groups can work on problems like the following at the institutional level:

a) student adminissions,

b) faculty evaluation systems,

c) mechanisms of changing the school curriculum to suit community needs,

d) management of support systems,

e) management of student motivation,

f) managing supporting staff,

g) examination system etc.

On each of the topics several groups may work simultaneously in a programme of institutional heads. Or each topic may be given to one or two groups and different groups may work on different topics.

For such group work the participants may be instructed to outline the existing system or practices, identify the strengths and weaknesses in these practices, and identify new systems or mechanisms of improving the existing systems. At the end of a specified period of time each group prepares a report, presents it to the total group of participants. After presentation those who did not participate may be requested to add to the list or comment on the suggestions. In this process the total group of participants get the benefit of ideas, thoughts, experiences etc. of all the participants.

Thus in the independent group method the trainer plays only a facilitating role. He formulates the problem, ensures distribution of the participants into meaningful groups (heterogeneous or homogeneous depending on the task, nature of problem and assumptions made about the participants). The trainer also gives the groups guidelines for group discussion (time, whether there should be a rapporteur or chairman, where they meet, etc.), makes sure that facilities for typing etc. are available for preparation of reports and that these are circulated to them before the plenary session, and monitors the plenary.

The trainer also helps the groups by supplying all information and material needed for their discussions.

Group work linked with other training methods: Group work may be linked with other teaching methods like lectures, case study, simulation, instrumented feedback, role play and in-basket exercises.

When it is linked with case study it may be used as a preparation before class discussion of a case. Case materials are handed over a day before the scheduled class discussion to the participants. The participants may be divided into groups. They may meet informally in their living rooms and discuss the case. If the case is a long case and there are many aspects involved in that case each group may be assigned one of the aspects. Such advanced discussion in groups helps the case leader to systematically bring out all aspects in the classroom and ensures more participation in the classroom.

It is also possible to assign home tasks for group discussion after a case is discussed. Such home tasks may deal with redesigning a problem situation to avoid future problems or conflicts. The class discussion may focus on problem diagnosis and subsequent group discussions on solutions. These in turn may be shared by the groups in the next class session.

Group work may be used in simulation exercises. Quite a few simulation games and exercises in behavioural sciences make use of group work. Exercises on co-operation, competition, team work, leadership behaviour, conflict resolution, decision-making etc. use group work. In addition to such use of groups by virtue of the nature of the game it is possible to follow the actual exercise with group discussion for analysis of the exercise.

In most of these exercises requiring group work, observer groups can be appointed whose role is to act as process observers. After the exercise or game is actually played, instead of only the trainer leading the discussion, the group of process observers may be requested to sit in a circle and share their observations and draw their learning points. While the observer group analyses the exercise as it was played, the player group observes and notes the feedback. This may be followed by an interface between the two groups and summarization or conceptual points by the trainer.

In instrumental training after the instrument is administered, the trainer introduces the concept about the characteristics measured by that instrument. After introducing the concept the class may be divided into small groups to discuss the extent to which different roles should have a particular characteristic. Such discussion may be followed by sharing the ideas and feedback on the instrument. Learning is much more involving in such work. For example, if a test to measure interpersonal trust is used for heterogeneous group of education managers, after presenting the concept of trust the trainer may divide them into homogeneous role groups (headmasters, heads of departments, deputy inspectors of schools, etc.) and ask them to discuss the extent to which this an important quality for each of their roles. This may then be followed by a feedback on the test to the participants.

Similarly group-work may be used in the in-basket exercises. After the trainees take the in-basket exercise they may be required to discuss the exercise in small groups. They are likely to bing out various priorities to be assigned to in-basket items. This may develop their administrative skills much better than a class lecture.

Making group work effective: For an effective use of group work the trainer may need to develop group work skills in the participants. If in a programme group work is likely to be heavily used it is necessary to develop group participation skills. Developing such skills will promote uniform and active participation. Fish-bowl exercises may be used for this purpose. In these exercises a group of five to eight people sitting in the centre actively discuss the topic, and other participants sit outside the group, listening to the group discussion (hence the term "fish-bowl" - the inner group being the fish, and the outer the bowl).

The topic for discussion may be a general or a specific one. The observer (outside) group is briefed on what to observe. They are briefed on making observations like who dominated the group, who participated most, who participated least, who played maintenance role, was the climate open and free or was it tense, were there any informal leaders, who took initiative, who was defensive, etc. The discussing group discusses for a short period (say 15 to 20 minutes). This is followed by the observer group making their process observations. While making their observations they are trained to differentiate process comments from content related comments. After the process feedback is given by the observer group, the roles may be interchanged. Some members from the observer group now take the inner circle ("fish") and the others form the observer group ("bowl"). The topic may be changed.

After they complete discussion the observer group members give their feedback. This process may be repeated a few times, each time new members forming the inner group. This helps people to become aware of group processes, may help some individuals to take more initiative and ensure uninform and active participation.

Chapter Seventeen

INSTRUMENTED TRAINING

Psychological tests, questionnaries, projective techniques, and other forms of inventories, as a class, are called instruments. There is increasing use of instruments as a training method. Most behavioural science programmes include some instruments for training. Instrumented training (or training based on instruments) is being so much used now that special training programmes are conducted for trainers in the use of instruments. Some countries have centres for testing and feedback for development.

Assumption and rationale

Use of instruments for training and development (at the individual level or the organizational level) is based on the following assumptions:

a) Development is faster when it is deliberate and planned.

b) Knowledge, skills, attitudes and other forms of behaviour change acquired during training are likely to be retained better if there is an effective involvement of the learner, i.e. the more the learner participates, the better will be the quality of learning.

c) Change will be faster and longer lasting if the learners can be helped to examine the implications of their behaviour for their own development and for creating better work climate.

d) Feedback on psychological and social instruments gives insight to people into their styles and behaviour to help them to experiment and plan changes.

e) Given the social process and pressures of work life people rarely get opportunity to sit and systematically examine their own behaviour patterns. In the absence of such opportunities in day to day life, training programmes, process clinics, counselling sessions, etc. can serve to help people to examine and reflect on their orientations and behaviour patterns.

f) Instrumented feedback through developing new awareness about himself is likely to generate motivation in the learner for experimentation and change.

Pre-training preparation

Before any instrument is used a lot of preparation goes into it. This is a part of the pre-training preparation. The pre-training preparation starts with identifying the dimensions on which people need to be trained, how important these dimensions are to a particular job or role, how people possessing these qualities and those who do not have these qualities would behave, how these qualities can be measured, development of actual indices, trying them out, standardizing the instruments and so on. As a result of the pre-training preparation a standardized instrument measuring a behavioural orientation would be available for use during the training programme. The following processes are involved.

Isolation of qualities (or variables)

Feedback becomes meaningful only when it is provided in a context or with a perspective. In a personal development programme, the context is that of personal development. Variables that contribute to the growth and development of a person may be selected. His attitudes, his motivations, his learning styles, his mechanisms of coping with stress and others can be selected for work. In the training programmes that intend to develop job-related capabilities the job-related dimensions should be focused. Thus in a programme attempting to develop leadership or institution-building capabilities, the behavioural dimensions that would help a person to become a successful leader or institution builder may be focused. Instruments may be developed to measure these dimensions.

For training extension officers it is necessary to be clear about the qualities needed in an extension officer to be effective. Suppose we find out that he should have a helpful attitude, counselling skills, positive attitudes to people, knowledge of all recent developments relating to the extension work he is doing and other qualities. We have identified the variables. The next step is to develop instruments to measure these variables.

The list of variables may be quite long, and they may not all be easily measurable. Some may be more important than others. It is necessary to select those variables that are readily measured, important for performing the role, and 'trainable'; i.e., people can change relatively with ease.

Development of behavioural indices

Once the variables are identified, the next step is to develop their behavioural indices. A relevant question in this regard is "How do people possessing this characteristic behave in various situations?" An answer to this question will give us clues for developing measuring devices.

Development of instruments

The next step is to measure the extent to which these indices are present in people. This relates to the development of instruments.

In most cases the variables may be attitudinal, i.e. the characteristic under consideration deals with general orientations or inclinations of people towards an issue, an object, a situation, etc. Such attitudinal variables can be measured by paper-and pencil-tests. We shall focus more on such tests, and shall not discuss details of other instruments.

Several techniques can be followed to develop paper-and-pencil tests or instruments for measuring behaviour or attitudinal dimensions. Several books are available on construction of scales and other tests. Standard scaling methods like 5-point scale, paired comparison, rank order, multiple-choice etc. can be used.

Standardizing the instrument

Once the pattern of the instrument is chosen and the instrument is constructed it is necessary to standardize it. Standardization aims at the following:

1. Perfecting the instrument by removing poor items and retaining a few good items (items analysis procedures may be used for this).
2. Establishing that the instrument measures what it is supposed to measure (establishing validity).
3. Ensuring that the scores obtained on the instrument are stable and that there is internal consistency in the instrument (aspects of reliability).
4. Establishing norms or finding out the average scores obtained by different groups to help interpretation of scores.

Detailed procedure in standardizing an instrument can be found in any book on psychological tests and instruments.

Programme announcement

A programme of instrumented training should have proper announcement, containing the information that psychological instruments would be used to help participants get feedback for their use. Such an announcement helps people to come to the programme with proper expectations. Otherwise some participants, reluctant to get instrumented feedback, may feel unhappy about such inputs.

Selection of candidates

Only interested persons should join the programme. This can be ensured through a selection process. If necessary the applicants may be interviewed to assess their interest. The more interested they are to learn about themselves, the more instrumented training is likely to be useful.

Creating an open climate

In instrumented training participants complete some instruments,

the trainer helps them to interpret the meaning and implications of their scores, and they discuss the implications for work life of the scores for their own behaviour and their organizations. Every participant assesses himself on some variables with the help of the trainer. Such an exercise is meaningful if done in a supportive climate. If the individual feels encouraged and accepted by the trainer as well as other fellow trainees he is likely to learn more. Similarly if the person feels encouraged to ask questions about himself and explore with others present, he is likely to learn more. Some amount of openness is helpful in the training programme.

Some participants may not like to share their data or scores with others. Some may give socially desirable answer on the instruments, in order to give good impressions to the trainer and others. In such cases the participants may not get correct feedback about themselves, and no benefit from training.

Hesitation and apprehensions can be reduced if the participants are clearly told that they would score their tests, and that only they would see their scores. The trainer would only explain the instrument and its framework, the scoring system, and interpretation of the scores. Some may however, volunteer their scores for interpretation in the group. By including these in the instructions at the time of administration of the test, the participants' inhibitions are likely to be reduced and they may be able to give frank responses. It may, therefore, be useful to assure the privacy and confidentiality of the scores.

However, while giving instructions the participants may be told that at a later stage they may volunteer to give their scores to help in arriving at group norms, for interpretation of individual scores by the participants by comparing their individual scores with these norms (e.g. group average). If the trainer plans to collect the scores to compute averages or norms, this may be explained to the participants.

An important requirement for instrumented training is to build interpersonal support from the beginning. Interpersonal support is reflected in the mutual acceptance, support, understanding, empathy and help the participants can give to each other. Such a climate will encourage the participants to volunteer to examine their behaviour and its implications with the help of other participants. The group becomes a resource for the individuals to learn.

The trainer can accomplish this by continuous reinforcement of open and supportive behaviour. He himself needs to be empathetic, supportive and understanding. When participants score low he should encourage them, explain the advantages and disadvantages of extreme scores, point out mechanisms for improving and quote examples of how people have changed. He should stress that there are "ideal" scores, that every person has his strengths in some dimensions, and it is possible to change orientations and behaviour with deliberate efforts.

Process of feedback

The most important aspect of instrumented training is the process of feedback. As explained earlier feedback has motivational value. The motivational value of feedback increases when it is given in a proper context or proper perspective. The learner should understand the implications of the scores for himself, his job and his organization. In the context of a goal and its desirability, feedback on where one stands in relation to the goal creates positive dissatisfaction, a desire to move towards that goal. The following may be kept in mind while giving feedback.

1. As far as possible the instruments should be administered in the beginning of the training programme. In the beginning the participants are open, unaware of the theories or "desirable" behaviour or scores. This is the proper context for completing the instruments. The responses are likely to be more open, frank, and unbiased. If the instruments are administered in the middle of the programme, by which time the participants have learned the relevant concepts, their responses may be influenced by "desirable behaviour".

2. Before scoring the instruments or giving feedback it is desirable to explain the concepts underlying the instruments. Giving the conceptual understanding before giving feedback has several advantages. It is easier for the participant to understand the concepts without being emotionally involved, and becoming defensive, which may happen if they have their scores on the instruments. Secondly, the participants will be able to contribute to the discussion and raise questions much more freely. Thirdly, the scores are likely to be better understood and appreciated, once the concepts are clear.

3. Before giving feedback it is important to make clear to the participants that there are no "good" or "bad" or "ideal" scores. Each individual should decide what is desirable for him. This he may do by considering the implications of having or not having a particular characteristic, attitude or orientation. It may be useful to stress that the characteristics or orientations are the product of experiences and the environmental factors. However, it is possible to change them. The first condition for change is a desire for change. Such a desire can be created only when people know where they want to go (the goal) and where they are at present (feedback on scores). Then the ways can be worked out to the goal. The instruments help people to know where they are at present. If one is satisfied with where he is then he need not worrty. Otherwise he can reflect and plan. Instruments are based on sampled behaviour. Some measurement errors may occur, although attempts are made to standardize the instruments. So the scores may be taken as pointers rather than as a definite representation. Such an explanation may put the feedback in a proper perspective.

4. While giving feedback the instruments may be scored by the trainer and returned to the participants or the participants themselves may score. Wherever the scoring is a necessary part of training, the participants themselves score the instruments. For example, in achievement motivation training, the participants themselves score their

protocols even when the scoring is complicated and technical. However, later the trainer can score and return the protocols to the participants. In other cases the trainer may simply read out the scoring key or write out on the board so that the participants can score their responses. It saves time for the trainer. The mode of scoring depends on the nature of scoring, trainer resources, time available, etc.

5. While interpreting the scores the norms (obtained by analysis of scores of one or more groups) should be presented. Scores by themselves have no meaning without such norms. While reporting the norms the trainer may give details about the groups from whom norms were obtained (age, occupation, sex, speciality, etc.). Norms may give the mean score, the highest and the lowest scores (range), standard deviation, etc. It is much more useful to give norms of groups closer to the participants. Thus if the training is to develop senior educational administrators, norms of scores by senior administrators may be given. Many a time the trainer may not have such norms. This may happen if the test is newly developed or if it is being used in a particular group for the first time. In such cases data generated by the participants themselves would be very useful. The trainer can quickly calculate the class average and announce the mean, the highest and the lowest scores of the class group.

The trainer can also give the possible range of observed scores on the instrument. Pointing out theoretical ranges and midpoints have their own value. However, such scores have limitations, and interpretation requires discussion of the scores in the cultural or group context.

6. The trainer can further reinforce learning by inviting volunteers to give their scores, and interpreting their scores in the class. Generally someone in the group of volunteers, given the proper climate, interpreting the scores of a few such volunteers helps the participants understand the concepts more clearly.

7. Besides interpreting the scores, wherever possible the trainer should give a short training note explaining the concept and summarizing relevant researches. Such a note will further reinforce classroom learning.

8. Lastly, some time should be devoted to clarify doubts. The participants often ask the trainer to indicate desirable scores. It is better to leave the judgement to each participant and ask them to decide for themselves what is desirable for them. The trainer may merely repeat the implications.

An example of an instrument based training unit on educational supervision is given in the appendix 17.1. The material in the preceding interpretation could be used for class discussion or lecture.

Integration and links

In instrumented training theoretical framework or conceptual models should also be explained. Theoretical knowledge increases the participants' insight and sense of power. Knowledge is power. Moreover, the feedback should give leads to participants for action.

They may need continued support from each other, from the trainer, from the organization or from other agents.

Some attention should be paid during the training to help participants integrate their learning and plan action on their return to their jobs. This can be done through action plans, through dialogue with higher officers, through further readings, etc. The trainer should help the participants to work out such links between what is learnt in the programme and what is required to be practised later. The trainer may also guide them to work out mechanisms of reinforcing what they have learnt and move towards the desired goal.

Examples of instruments for self-improvement and of instruments for organizational effectiveness are given in Appendices 17.2 and 17.3. respectively.

Appendix 17.1

Instrumented training: Educational supervision

This is an example of the use of an instrument for training of supervisors. The purpose is to illustrate the need of a thorough advanced preparation when the exercises is to be used.

Target group:	Heads of institutions (schools, colleges, etc.)
Entry behaviour:	The learner should have at least a year's experience as supervisor and should be interacting with his subjects (teachers) periodically.
Terminal behaviour:	The learner would be able to name the three styles of supervision and mention two important consequences for each style. In addition he would have gained insight into his own style.

Self-test

As a head of the institution you have been supervising your teachers. From your experience you may have developed several beliefs about the faculty, and how they should be supervised. Given below are some such belief-statements about teachers and how they should be handled. There are three sets of statements given below. Under each set there are three statements. You have to distribute 6-points among the three statements in each set. You may distribute in any combination like 3 (a) 1 (b) 2 (c) or 0 (a) 0 (b) 6 (c) or 0 (a) 1 (b) 5 (c) etc. Thus you have 6-points for each set and for the three sets. Please complete your rating distributions this way before you proceed to the next section.

1.

___ a) My faculty are capable of working on their own, there is no need to supervise them. They have to be helped once in a while only.

___ b) Teachers are not generally as active as they should be. They avoid work unless they are closely supervised.

___ c) Teachers here need to be constantly guided and helped. What they need is an affectionate head of the insti-

tution who can understand them and keep telling them what to do and what not to do.

2.

___ a) A good head of the institution is one who gives enough freedom for teachers and has faith in them.

___ b) A good head of the institution is one who treats the workers like a parent constantly advising them and telling them what to do and what not to do.

___ c). A good head of the institution is one who keeps a close eye on the teachers and makes them feel that he is constantly watching them.

3.

___ a) How well the faculty work depends a great deal on how well their supervisor guides them constantly.

___ b) How well a teacher works depends a great deal on how strict his institutional head is with him.

___ c) How well a teacher works depends a great deal on how much his superior keeps confidence on him and gives him freedom.

Material for a lecture or self-study on supervision

Supervision: As a head of an educational institution you are constantly looking after the activities of your staff, giving them directions, helping them solve problems, providing counselling, encouraging them, helping them plan the individual activities and co-ordinate the various activities of different members to achieve the organizational goals. In other words, you are constantly involved in the process of supervision. As a manager you supervise your staff. Supervision is constant observation, evaluation and guidance for the staff.

Supervisory function: The objective of supervision is to ensure that staff member does what he is supposed to do through:

1. understanding the needs and styles of operation of the member,
2. constantly evaluating his activities against the consequences they lead to and goals for which he is working,
3. guiding him in planning his activities,
4. evaluating the outcomes,
5. helping him plan future activities on the basis of past experiences, and
6. rewarding him for his work.

Understanding the needs of staff members: A good supervisor must understand the needs of his staff. If the supervisor does not attempt to understand the staff motivation he is likely to be ineffective as a supervisor. An understanding of their motives helps assessing the

various activities and then guiding him later.

Constant evaluation: In order to be able to guide the staff members, a supervisor should observe his various activities. Heads of institutions get very limited time to observe the activities of all staff. At least they should develop a mechanism of getting and maintaining information about the various activities. Without such an understanding they will not be of help to the staff or guide them. Heads of institutions could probably have periodic discussions individually with the staff in an attempt to understand their concerns. A good information system about the activities of various members and the results of these help in ensuring that the staff members learn from each other's experience.

Guidance for planning activities: Supervision also involves helping each member to plan his activities. Heads should help the staff plan their activities. Such a help involves providing information, helping them to set goals for work, helping them to prioritize various activities, etc.

Rewarding: Supervisory function has a motivational aspect too. That is by rewarding staff members whenever they accomplish. Most supervisors fail to do this consequently bringing down the general motivational levels of the staff. Rewards can be of various forms and need not always be monetary. Giving higher responsibilities, saying a word of appreciation, etc. have high rewarding values.

Styles of supervision

The functions of a supervisor as described in the earlier section can be performed in different ways depending upon the beliefs and values of the head. The style in which the supervisor operates is called as his supervisory style. In a way there are as many styles of supervision as there are heads of institutions, because each head is unique in some way or other. However, research has shown that there are distinctively identifiable supervisory styles at a broader level. Two such styles that have been researched immensely include the task-centred and the person-centred supervisory styles.

Employees who work with excessively task-oriented supervisors may develop negative attitudes to work and to their boss. They might work out of fear and may have job dissatisfaction than satisfaction. They may discover short-cuts in their work which may in the long run affect the institution's performance.

Employee-centred supervision

In contrast the person-centred supervisor is people-oriented. He believes that a concern for staff, their needs, welfare, etc. are important. If they are taken care of they would be able to work well and are capable of taking responsibilities and they need not be reminded too frequently. His concern for the human side may be reflected in his attempts to keep the staff in good humour, frequent enquiries about their problems (which are often unrelated to work), etc. Such type of

supervision in extremes also leads to inefficiency. There is a danger of such a head being perceived as too lenient, easy going, etc. Staff members may some times take advantage of this.

The task-oriented and person-centred styles may not be present in pure forms but the same officer may show different combination of this. The effectiveness of the styles also may depend on various factors like the nature of task, the nature of the member being supervised and so on.

There are also other styles that are recognizable in supervision.

Benevolent supervisor is one who is very protective of his staff, who keeps telling them every time what they should do and what they should not do, coming to their rescue whenever they need and is father like in his relationships with them. Such a supervisor is liked very much by the staff as they can always look for him for advise and get his protection when needed. Such type of supervisors are effective as long as they are physically present. In their absence, the staff may feel directionless and lost. Such types of supervisors tend to produce dependence in staff and initiative taking behaviour may not be reinforced. However, they cater very much to security and belongingness needs of the staff. In his absence the staff may lose enthusiasm.

Critical supervisor is one who is critical in his approach to the staff. He can not tolerate any deviation from norms, lack of quality in work, indiscipline, etc. He is also not tolerant of the mistakes of the staff. He is criticising them quite frequently. He also has a knack of finding mistakes. Such type of supervisors make the staff feel incompetent. They are not liked and people may work only due to fear. They also have tendencies to view working as clearing disorder in the environment.

Self-dispensing supervisor is one who has immense faith in his staff members and leaves things entirely to them. He only helps them in setting broad goals and leaves them free to work on their own. He provides guidance not on his own initiative but when needed by the employee. Staff members with this kind of supervision are likely to feel competent and confident in their work. They are quite independent, i.e. they can collaborate with each other and work together.

Application

No single supervisory style is universally effective. The effectiveness of the style depends on the person being supervised, the nature of the task and various other situations.

For example, if the faculty member is new to the field and does not know much about teaching, a benevolent supervisor style is helpful. A critical supervisor may scare him and inject fear. A self-dispensing supervisor may leave him wondering what to do.

A capable staff member feels comfortable with self-dispensing style of supervision as he would like to take initiative and work on his own. He may feel interfered by a benevolent supervisor who constantly gives him "unwanted advice".

Staff members with indiscipline probably could be corrected through occasional use of critical supervision. Constant use of critical supervision may not do any good in the long run.

Feedback on self-test

In the self-test you have taken in the beginning of this unit items relating to the three supervisory styles (viz. benevolent, critical and self-dispensing) have been included.

Items 1c, 2b and 3a deal with the benevolent style. Add the points you assigned to these items, you get your benevolent style scores.

Items 1b, 2c and 3b deal with critical supervisory style. Add the points you assigned to these items to get your supervisory style score on this.

Items 1a, 2a and 3c deal with self-dispensing supervisory style. Add the points you assigned to these items to get your supervisory style score on this.

If your score on any one of these styles is 9 or more it reflects a very dominant tendency in you to use that style. Scores ranging from 12-18 indicate very strong dispositions. You may like to examine the implications of your style in the context of what has been said earlier in this unit.

If your scores on all the three styles are same or near to equal then you indicate no style dominance. You may have been using all styles discriminatively or indiscriminatively. Styles having low scores indicate your tendencies to reject or not to use that style. You may like to discuss and check with your colleagues about your style and their implications.

Appendix 17.2

INSTRUMENTS FOR SELF-IMPROVEMENT

Usually in instrumented training instruments used relate to individual participants' behaviours, styles, orientation, etc. We give examples of two such instruments in this chapter. Several such instruments are available for use in training.

A. Motivational analysis of behaviour (MAB)

About the instrument

MAB gives analysis of 'approach' and 'avoidance' behaviour of a person in his organizational role. While working in an organization (as a trainer, or as an administrator, etc.) a person satisfies many of his psychological needs. Each need has a function. However, the needs can be satisfied either in such a way that the person avoids the problems, or in a way that approaches the challenges and problems. This instrument gives some insight about six main needs - these of achievement (concern to excellence), influence (concern to make impact), extension (concern to help and serve others), control (concern to monitor matters), affiliation (concern to establish personal relationship) and dependency (concern to learn and seek guidance).

MAB can be self-administered. A person can score his own behaviour, and get scores on these six needs, on both dimensions (avoidance and approach). One is likely to be more effective the more one uses the approach dimension, more than avoidance dimension.

The instrument

Name:_____ Date:_____

This instrument is for your personal use. You will use the scores for examining your behaviour, and for planning to become more effective. So answer the items honestly.

Various dimensions of behaviour on the job are listed below. Aganist each dimension give your rating of your behaviour by writing one number, using the following key.

Use 1 if you hardly show this behaviour.

Use 2 if you behave this way on a few occasions.

Use 3 if you show this behaviour sometimes.

Use 4 if you tend to behave this way.

Use 5 if you behave this way most of the time.

_____ 1. **I enjoy working on moderately difficult (challenging) goals.**

_____ 2. **I am overemotional.**

_____ 3. **I am forceful in my arguments.**

_____ 4. **I refer matters to superiors.**

_____ 5. **I keep close track of things (monitor the action).**

_____ 6. **I make contributions to charity etc.**

_____ 7. **I set easy goals and achieve them.**

_____ 8. **I relate very well to people.**

_____ 9. **I am obsessed with my own ideas, and am a poor listener.**

_____ 10. **I follow an ideal.**

_____ 11. **I demand conformity from my people.**

_____ 12. **I take steps to develop my people.**

_____ 13. **I strive to excel performance/targets.**

_____ 14. **I give more importance to personal relationship than to organizational matters.**

_____ 15. **I build on the ideas of my subordinates.**

_____ 16. **I seek approval of superiors.**

_____ 17. **I ensure that things are done according to the plan.**

_____ 18. **I consider difficulties of others even at the cost of the task.**

_____ 19. **I am afraid of making mistakes.**

_____ 20. **I share feelings with others.**

_____ 21. **I enjoy arguing and winning in my arguments.**

_____ 22. **I have genuine respect for seniors.**

_____ 23. **I admonish people for not completing the tasks.**

_____ 24. **I go out of my way to help people.**

_____ 25. **I search new ways of overcoming difficulties.**

_____ 26. **I have difficulty in expressing negative feelings to others.**

_____ 27. **I set examples and models before others.**

_____ 28. **I hesitate to take decisions.**

_____ 29. **I clearly define the roles and procedures.**

_____ 30. I undergo personal inconvenience for others.

_____ 31. I am more conscious of my limitations or weaknesses.

_____ 32. I take interest in personal matters of my people.

_____ 33. I am lassaiz faire (do not care about how things happen).

_____ 34. I learn from my seniors.

_____ 35. I centralize most tasks and do not delegate.

_____ 36. I have empathy for an understanding of my people.

_____ 37. I want to know how well I have been working, and use the feedback effectively.

_____ 38. I avoid conflict in the interest of group feelings.

_____ 39. I give new suggestions and ideas.

_____ 40. I tend to please others.

_____ 41. I lay down systems clearly.

_____ 42. I am willing to take the responsibility for others' work to help them.

_____ 43. I show low self confidence.

_____ 44. I recognize and respond to feelings.

_____ 45. I tend to take credit for work done in a team.

_____ 46. I seek help from experts.

_____ 47. In case of difficulties I rush to put things right myself.

_____ 48. I develop team work amongst my people.

_____ 49. I work effectively under pressure of deadlines.

_____ 50. I am uneasy and less productive when working alone.

_____ 51. I give credit and recognition to others.

_____ 52. I look for support for my action and proposals.

_____ 53. I seek positions of authority.

_____ 54. I hesitate to take strong action because of human considerations.

_____ 55. I complain about difficulties and problems.

_____ 56. I take initiative in making friends with other colleagues.

_____ 57. I am more conscious of status symbols like furniture, size of room etc.

_____ 58. I like to get ideas from others.

_____ 59. I tend to form cliques.

_____ 60. I like to take responsibility for group work.

Scoring key

The following key is used to get scores on two dimensions of six motives, as reflected in the behaviour of the rates. Maximum and minimum scores are 1 and 25 on each dimension of each need. A net score of "need competence" for each need in the organizational context is obtained by subtracting the "avoidance" score from the "approach" score. The score on a need is given by the sum of the ratings given to the items shown below.

	Motives	Approach items	Avoidance items
1.	Achievement	1, 13, 25, 37, 49	7, 19, 31, 43, 55
2.	Influence	3, 15, 27, 39, 51	9, 21, 33, 45, 57
3.	Extension	12, 24, 36, 48, 60	6, 18, 30, 42, 54
4.	Control	5, 17, 29, 41, 53	11, 23, 35, 47, 59
5.	Affiliation	8, 20, 32, 44, 56	2, 14, 26, 38, 50
6.	Dependency	10, 22, 34, 46, 58	4, 16, 28, 40, 52

B. Education management orientation inventory (EMOI)

About the instrument

EMOI measures internal-external locus of control. People who believe in their own capacity to make an impact on the environment and initiate changes are called internals. The internals tend to attribute success and failure to their own actions rather than to the external environment. Externals or people high on external control tend to view life events as determined by chance, luck, powerful people and,such happens to them,by external influences.

Consequently, it has been found that internals have been found to adopt innovations fast, work hard, take good care of equipment as scientists, carefully plan, believe in scientific decision-making, choose competent people to work them and above all dynamic. On the other hand externals have been found to rely on chance, fate, etc. and in the process they take things easy, tend to be passive and less effective as managers. Externals may tend to be conformists.

Internality-externality is a learnt behaviour. The orientations can change significantly depending upon the life events. With natural calamities like cyclones, earthquakes, etc, after wars and so on externality tends to increase. People born in communities that are discriminated against and deprived of certain facilities, privileges etc. have also been found to be externals.

The instrument.

Given below are 20 pairs of items. You will indicate the extent of your agreement by distributing three marks between each pair. Assign '3' to (a) and '0' to (b) if you agree only with (a) and do not agree at all with (b). You may give '2' to (a) and'1' to (b) if you agree, more with (a) than (b) or '1' to (a) and '2' to (b) if you tend to agree more with (b) than (a), etc. Thus for each pair of items your distribution of three marks should indicate your relative agreement. Answer all items. You can only use the following combinations: 0, 3 or 2, 1, or 1, 2, or 3, 0 for each pair.

1. ____ a) A good administrator believes in participative decision-making.
   ____ b) Participative decision-making need not lead to effective administration.

2. ____ a) Whether a capable educationist will get to the top management level or not depends upon how capable a manager he is.
   ____ b) Capable people can not make it to the top without pulls from powerful people.

3. ____ a) Whether or not a student gets good marks depends upon how hard he works.
   ____ b) Howsoever hard a student works there is no guarantee that he will get good marks as many factors influence performance in examinations.

4. ____ a) With proper planning development can be brought about faster in any community.
   ____ b) Howsoever carefully one may plan it takes its own time to develop any section of the society.

5. ____ a) Effective educationists who could not progress did not have good stars.
   ____ b) Effective educationists always find their way to progress ultimately.

6. ____ a) With proper systems teacher can be motivated to work hard.
   ____ b) No matter what you do, teacher will always show the same low level of performance.

7. ____ a) There is too much student unrest nowadays.
   ____ b) Student unrest is provoked by politicians.

8. ____ a) In the long run educationists are responsible for a poor education system.
   ____ b) It is the powerful politicians who give wrong directions to education. Educationists can do very little about it.

9. ____ a) It is ultimately the staff unions that control staff behaviour.

   ____ b) An effective administrator can always manage the staff unions.

10. ____ a) In my case depending on luck never worked out as well for me as others.

    ____ b) In my case depending on luck and taking things easy has always put me at ease.

11. ____ a) For a hardworking student examinations are not difficult.

    ____ b) Howsoever hardworking a student may be chance factors do play a significant role.

12. ____ a) One must look at all possibilities and gather as much information as possible before taking a decision.

    ____ b) Now-a-days a good decision can as well be made by flipping a coin rather than working time.

13. ____ a) Effort always pays.

    ____ b) Luck must be there for a pay off of efforts.

14. ____ a) One can not be a good leader without right breaks.

    ____ b) People who fail to become good leaders did not have the capability to be leaders.

15. ____ a) Many of the unhappy things in people's lives are due to bad luck.

    ____ b) Unhappy things in people's lives are due to the mistakes they make.

16. ____ a) No matter how nice you are some people just don't like you.

    ____ b) People who are not liked by others do not have skills to impress others.

17. ____ a) Many major events in our lives are determined by external factors, we have little or no control over them.

    ____ b) Ultimately every person has the major responsibility for what happens to him.

18. ____ a) A competent headmaster can always initiate change and do wonderful things.

    ____ b) Headmasters can do little to improve their school affairs as it is somebody else that controls schools.

19. ____ a) Good supervision can improve a lot in the quality of education.

    ____ b) Supervision can not improve quality of education in performance as it depends on a number of factors beyond the control of educationists.

20. ____ a) Capable people get rewarded for their work ultimately.

____ b) No matter how hard one may work sometimes one's worth goes unnoticed.

Scoring key and interpretation

Add scores assigned by the respondent to the following items. 2 b, 3 b, 4 b, 5 a, 6 b, 8 b, 9 a, 10 b, 11 b, 12 b, 13 b, 14 a, 15 a, 16 a, 17 a, 18 b, 19 b, 20 b.

Items 1 and 7 are not included for scoring as they are filler items.

The scores may range 0 to 54. Scores above 27 and 54 indicate externality. The higher the score or the nearer it is to 54 the higher the externality. Scores less than 27 indicate more internal orientation. Scores below 13 indicate high internality.

Appendix 17.3

INSTRUMENTS FOR ORGANIZATIONAL EFFECTIVENESS

We give two instruments that can be used for instrumented training and one to be used for management of training. The first two instruments can also be used for diagnosis and evaluation purposes.

A. Institutional climate profile

About the instrument

Institutional limate rofile (ICP) gives the profile of the climate of a training institute or a similar organization in terms of six motivations: achievement, influence, extension, control, affiliation and dependancy. Various members of the institute (faculty members, research staff, and other employees) answer the instrument. The profile can be prepared for the institute as a whole, or according to the department or levels.

The instrument

Below are given eight main questions about functioning of your institute. For each question, six different answers are provided. Rank all the six answers for each question in the order of their applicability to your institute. Give rank 1 to the answer which is most characteristic of your institute (best describes it), rank 2 to the next characteristic answer, and so on; rank 6 will be given to the answer which is less/least characteristic or descriptive of your institute. Do not leave out any alternative; rank all the six for each question.

1. What is the main concern of the faculty in this institute?

____ a) To follow laid down rules and procedures.

____ b) To make training socially relevant.

____ c) To maintain a high standard of training, do research, and develop new material.

____ d) To consolidate one's own position and get into important positions.

____ e) To maintain friendly relations, and

____ f) To develop one's competence and expertise, and produce change in the participants.

2. How are interpersonal relations characterized in the institute?

____ a) Informal groups around experts.

____ b) Informal friendly groups.

____ c) Cliques (small closed groups) of some members.

____ d) Supporting groups formed to discuss ways of excelling in the main work of the institute.

____ e) Strong associations with one's senior colleagues, seeking guidance from them.

____ f) High concern for each other, resulting in spontaneous help and support.

3. What is the main orientation of the institutional and departmental heads?

____ a) To check mistakes and 'catch' the person.

____ b) To expect and demand that they are consulted for approval and suggestions.

____ c) To help the faculty to improve and progress (advance).

____ d) To reward outstanding work.

____ e) To use their expertise and competence to influence, rather than their formal authority.

____ f) To maintain good relations with the faculty, even overlooking performance.

4. What is the characteristic philosophy of dealing with mistakes of the faculty?

____ a) Overlook the mistake, maintain a friendly group.

____ b) Seniors can commit no mistakes and the juniors dare not make one.

____ c) Support and help the person to acknowledge and analyze his mistakes.

____ d) Mistake is an experience from which one can barn to present failure and improve in future.

____ e) Proper guidance by seniors in advance helps in preventing mistakes.

____ f) Take help of an expert (irrespective of his position in the hierarchy) to analyze the mistake and learn from it.

5. What approach is followed in the institute in dealing with conflicts?

____ a) Analyze the conflict by discussing (by the concerned persons or departments) the various dimensions, to find solution leading to achievement of the stated goals.

____ b) Avoid or smoothen out conflicts to maintain good friendly climate.

____ c) Refer the conflict to a senior or experienced person for arbitration.

____ d) Set the stronger and forceful point of view to be accepted.

____ e) Appeal to the overall good of the institute and its ideals in resolving conflicts.

____ f) Consult and involve the experts in solving the conflicts.

6. Who are usually involved in making decisions?

____ a) Top people with concern to maintain friendly atmosphere.

____ b) Top people and communicated to others.

____ c) People who have demonstrated their ability to manage things well.

____ d) A small clique (closed group)

____ e) Knowledgeable persons who can carry others with them with logic and persuasion.

____ f) Concerned people, with the overall good of the employees, the institute, and the society in mind.

7. On what basis are people rewarded (not necessarily monetary rewards, but other intrinsic rewards like special assignments?

____ a) Excellence in performance and accomplishment (research, writing, creativity, teaching).

____ b) Expertise shown in the impact made on the participants.

____ c) Loyalty.

____ d) Development of junior colleagues and building collaboration and team work.

____ e) Maintaining discipline and controlling subordinates.

____ f) The ability to get along very well as being liked by most people.

8. How are innovations made in the institute?

____ a) Initiated by and implemented through experts and knowledgeable people.

____ b) Initiated and introduced by the top people.

____ c) Initiated by a faculty member, after seeking approval and guidance from senior people.

____ d) Initiated at any level, and discussed by the faculty whether it is socially relevant and will strengthen the institute.

____ e) Initiated and implemented at all levels, by those who are concerned with results (that innovations are successful).

____ f) Not much interest in innovations, as these disturb well established friendly climate.

Key

Key is used to get scores on six motivational aspects of the organizational climate. Two methods can be followed to get the scores. The ranks for each motivational aspect (columns) can be added, and averaged to give mean ranks of the motivations. The minimum and maximum ranks can be 1 and 6. The lowest rank score will indicate the highest rank. These final mean ranks give the profile of motivational climate. Or, the following weightages can be used to calculate the scores. The total score on each motivation for all the 12 dimensions may then be multiplied by 5/6. The maximum and minimum scores on each motivation will be 100 and 0 respectively.

Rank	1	2	3	4	5	6
Weightage	10	9	7	3	1	0

The rank given to each of the six alternatives (a to f) may be written down in a matrix similar to the one given below (the key). Addition of the ranks obtained by each motivational dimension (achievement, influence etc.) on ten dimensions may be added as suggested above.

	Achievement	Influence	Extension	Control	Affiliation	Dependency
1. Orientation	c	f	b	d	c	a
2. Inpersonal relationship	d	a	f	c	b	e
3. Supervision	d	e	c	a	f	b
4. Decision making	c	e	f	d	a	b
5. Managing mistakes	d	f	c	b	a	e
6. Managing conflict	a	f	e	d	b	c
7. Managing rewards	a	b	d	e	f	c
8. Innovation and change	e	a	d	b	f	c

B. Trainer styles profile (TSP)

About the instrument

This instrument uses the concepts of Transactional analysis, and the idea has been taken from Muriel James (OD BOSS). We all have three ego states (Parent concerned with nurturance and regulating behaviour, adult concerned with information processing and problem solving and child concerned with creativity and reactive behaviour like rebellion). We take positions of being OK or not-OK (and treating others as such). The instrument uses a combination of the ego states and life position to give ten styles. These are shown in the scoring sheet.

The instrument

Below are given some statements describing behaviour of a trainer. Please read each statement and indicate by writing 1, 2, 3, 4 or 5 in the space provided on the left side how far this statement is characteristic of you.

Write 5 if you almost always behave this way.

Write 4 if you often behave this way.

Write 3 if you sometimes behave this way.

Write 2 if you occasionally behave this way.

Write 1 if you rarely or never behave this way.

____ 1. Assure the participants of your availability to them.

____ 2. Give the participants the needed solutions to their problems.

____ 3. Help the participants raise questions with you about what should or should not be done.

____ 4. Admonish the participants for not acting according to your advice.

____ 5. Encourage the participants to collect all the necessary information needed to solve a problem.

____ 6. Collect from the participants all the information and data, even when these are not immediately needed or used.

____ 7. Encourage the participants to think out unusual and new solutions.

____ 8. Discuss new ideas with the participants even without working out their details.

____ 9. Take up the participants' cause and fight for them.

____10. Communicate strong feelings and resentment to the participants, without caring whether this will affect your relationships with them.

____11. Help the participants know some of their own strengths.

____12. Take over the participants' problem, and work out solutions for these.

____13. Help the participants see ethical or normative dimensions of some of their behaviours or actions.

____14. Tell the participants what should or should not be done.

____15. Encourage the participants think out (generate) many alternatives before accepting one.

____16. Give the participants all the knowledge (so that they feel overwhelmed, and usually have problems of understanding and using it).

____ 17. Help the participants try out new things.

____ 18. Overwhelm the participants with new ideas.

____ 19. Fight for the participants to get them needed facilities.

____ 20. Champion the participants' cause even at the expense of cost effectiveness.

____ 21. Reassure the participants of your continued help.

____ 22. Establish a relationship with the participants so that they often seek your advice.

____ 23. Help the participants examine appropriateness of the proposed action.

____ 24. Show displeasure if the participants run into problems because of not following your advice.

____ 25. Encourage the participants to search various resources they can use for further information or help.

____ 26. Discuss with the participants their work problems, without much sensitivity and attention to their feelings and moods.

____ 27. Help the participants feel excited in trying out new ways and take a problem as a challenge.

____ 28. Create enthusiasm in the participants about new ideas which they may usually find as distracting them from the main problem.

____ 29. Express frankly your feelings and reactions to the participants.

____ 30. Express resentment to the concerned authorities about what has not been done for the participants.

Scoring sheet

Your name:_____ date:_____

The TSP gives you the profile of your trainer style. A trainer uses all the three ego states (parent, adult and child) while interacting and working with the participants. He may use an approach, OK, functional position, or he may use an avoidance, non-OK, dysfunctional position. You will get your profile by entering the total score of the items mentioned in each cell in the following figure. In each case the minimum score is 3 and the maximum is 15.

		Parent		Adult	Child	
		Nurturing	Regulating		Creative	Rebellious
Approach	Items	1, 11, 21	3, 13, 23	5, 15, 25	7, 17, 27	9, 19, 29
OK	Name	Support-ive	Normative	Problem-Solving	Inno-vative	Confront-ing
Functional	Your Score					
Avoidance	Items	2, 12, 22	4, 14, 24	6, 16, 26	8, 18, 28	10, 20, 30
Not-OK	Name	Patroniz-ing	Prescrip-tive	Task-Obsessive	Bohemian	Aggressive
Dysfunctional	Your Score					

The style having the highest score is the dominant, and the one with the next highest score is the back-up style.

Your dominant style _____

Your back-up style _____

Chapter Eighteen

DISTANCE TRAINING

The traditional methods of in-service training through short-term programmes, seminars and workshops are extremely inadequate in view of the size and distribution of education managers needing training, the diversity and complexity of their training needs, the need to disseminate information on new concepts, experiments and experiences widely, quickly and frequently, and the cost implications. From a wider point of view of in-service training, continuously reinforced by opportunities for professional growth, it has been found that distance teaching modality holds out the most promising solution to this problem.

Distance teaching helps in minimizing contact time, ensures basic homogenity in entering behaviour of participants and introduces the practice of self-learning. It is an effective mechanism for both in-service training and professional growth of educational personnel. Its advantages lie in its economy (with less costs more people can be covered), coverage (a large number of people can be covered simultaneously over a short period of time), its characteristic of continuing learning on the job without disturbing the job, the possibilities of reaching distant corners of a country, and the scope for the learner to work at his own pace.

Recognizing the advantages of distance teaching and the need for training all planners and managers in education, many countries are initiating distance teaching activities.

The National institute for Educational planning and administration in India; the Institute of Education of Tribhuvan University, Nepal;Allama Iqbal Open University in Pakistan, and the office of the Planning service of the Ministry of Education and Culture, Philippines are some examples of the centres which have initiated distance teaching activities in educational planning and administration. Of these only in Pakistan the correspondence courses in educational planning lead to a Master's Degree. Unesco Regional Office for Education in Asia and the Pacific (ROEAP) has developed a set of seven books of correspondence course material for a "basic training programme in educational management". These books are being revised periodically on the basis of the feedback received. Many countries are in fact using these books as the basic material and are adapting or modifying them for local use. The basic units produced by Unesco and the units prepared by other countries in the region for distance education are presented in Appendix 6.3.

While the advantages of distance teaching are many, in order to cash on the advantages a lot of effort is required for preparing distance teaching material. Poorly prepared distance teaching materials, inadequate attention paid to organizational aspects, lack of supplementary training efforts like contact sessions, and lack of organizational support for the learners from their own organizations may come in the way of achievement of the desired objectives. This chapter discusses some of these aspects.

Forms of distance training

Different forms or different media could be used in distance training. Correspondence courses through specially designed books is the most commonly used form. Correspondence training can be supplemented with other media like radio, television, recorded lessons and contact sessions. The contact sessions may also take various forms like learner seminars, periodic meetings, visits to experimental sites, visits to libraries and use of mobile teams of trainers. While the use of these media are very well known in correspondence education, distance teaching for educational planners and administrators poses some unique problems and imposes constraints on the use of multimedia.

For example, use of radio and television for preparing educational planners and managers may not always be feasible, because there are demands on these media from other categories of learners (regular students, farmers, adult learners, etc.). Considering the national priority and the magnitude of coverage, priority is given to these categories than educational managers. A televised programme on education management can at the most aim at covering one person per village (i.e. the headmaster).

Thus while theoretically it may be possible to use these media, there are practical limitations. Therefore, the most useful method is correspondence training. Correspondence training in educational planning and administration can be made very effective by preparing materials in innovative ways and organizing periodic training sessions at the training institution. Thus distance teaching may primarily include the following activities:

1. Individual work, viz.,
   a) units/modules written in simple language, lucid in presentation and short enough for an evening's study;
   b) assignments involving investigation into participants' working environment for data and information;
   c) simple tests to assess mastery over computational techniques used in processing statistical data for planning purposes;
   d) guided readings of a few selected publications, preferably with main points emphasized in advance;

e) inbasket material which the learner can use by himself, to learn some dynamics of management, and get feedback on some aspects of his administrative style and behaviour.

2. Contact sessions with lectures, panel discussions, debates, simulation exercises, group work, field study, research work, project work, participant organized exercises, and guidance by a local tutor who assists in the study and conducts group discussions and tutorials, particularly where the tutor is a senior officer of the administrative set-up who can supplement lessons with local examples and relate theory to practice, and also supplement what was learnt through correspondence.

Organizing and managing distance teaching requires a thorough understanding of various components. The following are the important components.

1. The media used in distance training and choice of the media.
2. The design of the distance training programme.
3. Curricula and modules.
4. Finalization of the material (editors).
5. Resource people for guidance of learners (tutors).
6. Organizational requirements.
7. Mechanisms of maintaining learner motivation.
8. Evaluation and follow-up.
9. Certification.

An attempt is made in this chapter to elaborate and discuss the importance of these components and provide some guidelines for trainers/ distance training heads on how to manage these components.

The media of distance training

There are many different media from which to choose in designing a system for teaching at a distance. In the first wave of development of correspondence education in the late 19th century, the post was the most commonly used technique. More recently television, radio, cassette records, etc. are used as appropriate techniques. Since a number of different possibilities may be open to us, it makes sense to use, or at least consider using, as many as possible. In this way we can balance the strengths and weaknesses of the different media. We will probably finish up with a more effective educational package as a result. Individuals learn in different ways and some probably learn better from one medium rather than from another. The changes from one medium to another may also prevent students getting bored with the course, and may therefore help to keep them working - already recognized as one of the central problems in distance teaching.

There is one theoretical point of the greatest importance which underlies the question of choosing between teaching techniques. Generally speaking where one technique has been compared against another they have been found equally effective. There is, for example, a very large body of American literature comparing televised teaching with face-to-face teaching. It has been demonstrated conclusively that with matched groups of students there is usually no significant difference in learning between televised and face-to-face instruction. The research on other techniques of teaching produces similar findings.

This finding, on the other hand, can be regarded as a liberating one: it enables us to choose which medium is most suitable for a particular situation, with the reassurance that all will work reasonably well. In choosing between media for distance teaching then, we can choose the medium which appears to be most suitable for a particular educational problem with which we are faced. In fact, our choice is bound to be a pragmatic one at least until we have a more developed theory of instruction.

Books:

Books are extremely convenient to use. They require no additional apparatus, can be read at any time and place, and can be rapidly skimmed. This last quality is important and is in contrast with, say, a radio or television programme where one can not avoid spending time or redundant or irrelevant material. The existence of the publishing industry means that we are quite likely to find books already in existence which are suitable for a correspondence course even if they are seldom exactly what we want. In order to accept the economic advantages of using books designed for a general market, we have to accept the constraints which the form of those books puts on our own correspondence course.

Just as the existence of books in his own field is a convenience to the correspondence course writer, so their form offers advantages to the student. In designing a correspondence course we should usually ensure that all the factual information which a student needs should be in print - either in a book or in the course itself so that he can refer to it whenever necessary. (This does not mean that every point has to be explained in print; there will be situations in which a lengthy explanation is better given through a different medium. In that case, the printed version may simply have the function of reminding the student of the explanation).

While books may be very efficient at conveying information, and even at stimulating cognitive learning, they are much less suitable for effective or psycho-motor learning. Similarly it is a rare author whose excitement for his subject can be conveyed in written prose: text books especially tend to be impersonal and unexciting. It is more difficult for them to convey the enthusiasm which can quite easily be conveyed face-to-face or in a broadcast.

Finally, books are a one-way form of communication. We can't tailor a book to the needs of our students, or alter it once the course has started, if it doesn't prove as suitable as we had hoped. On the other hand it may be possible, though probably inconvenient to alter correspondence course material, while the tutor's response to his students will always be affected by their needs and interests. And one of the most important uses of broadcasts and face-to-face sessions is to cope with student problems as these crop up, and to adapt the educational process more generally to the needs of the students as these are redefined in dialogue.

Audio-visual media

For many purposes, we can consider radio and television together. In contrast with books, both give a fleeting impression rather than a permanent record of the information they convey. In contrast with books too, both give the student little or no choice of when to study. This is a mixed course: many research studies have shown how important it is to arrange for broadcasts to be repeated at least once in order to give students a fair chance of watching or listening to them.

Thus broadcasts have advantages for correspondence education quite apart from their use as an effective way of communicating some types of information. Many correspondence students have commented on their value in communicating enthusiasm and in overcoming the loneliness and impersonality of distance study. In part, broadcast lessons help to overcome students' isolation simply by coming at regular and frequent intervals, often more regular than any other communication from their tutor or college. In part they probably seem personal because they are, in some real sense, like face-to-face communication. In the case of television, too, broadcasts may appear personal because we can see the speaker and so benefit from his gestures and attitude and expression, things which are necessarily lacking on the radio or telephone or in print.

Thus there are psychological arguments for using broadcasts if possible, just as there are social ones. Broadcasts may well enable us to reach groups of students who would not otherwise take our courses. Broadcasts, too, may give us greater flexibility in planning a course. If it is possible to defer the production of at least some broadcasts until after students have started working, then it may be possible to plan them around students' common difficulties.

It is more difficult to define the pedagogical role of broadcasts and in doing so it is necessary to distinguish between radio and television. The most important contrasts between them are not educational at all but economic and social: radio is far cheaper than television to produce. As a result it may be easier - because cheaper- to design a flexible learning system with radio rather than with television. With television, pressures to make programmes which can be used and re-used will be far stronger. Radio and television often reach different audiences, too.

The technique of getting students to listen while following the printed text works in other subjects, too: sound recordings with an associated duplicated text have been used successfully in teaching medicine. Here, sound can be used to direct the student to particular aspects of a printed text and so can add the emphasis necessarily lacking in print.

Beyond broadcasting's power to stimulate or enliven learning, to stimulate the imagination and to focus attention, it has particular value in synthesising: the spoken word is probably better than the written in drawing together the different elements in a subject whose fusion makes for clearer understanding.

Choosing the medium

We don't have a theory of instruction which enables us to make easy decisions about the best medium to use in a particular situation. Indeed Paulo Freire has warned aganist too narrow an interpretation of the plea for one by pointing out that if our option is for man education is cultural action for freedom and therefore an act of knowing and not of memorization. This act can never be accounted for in its complex totality by a mechanistic theory, for such a theory does not perceive education ... as an act of knowing. Instead it reduces the practice of education to a complex of techniques, naively considered to be neutral, by means of which the education process is standardized in a sterile and bureaucratic operation.

The point of this brief summary of what is known about techniques is to offer help in choosing the techniques we use to achieve ends that - hopefully - are humane rather than mechanistic. Our choice will depend on the resources available to us and the kind of learning situation in which our students are working. Similarly, the way in which we integrate the various different media will depend on the kind of course being developed. Questions about linking the media are not, therefore, considered in further detail here - because now that the theoretical bases for decisions about linking them have been stated, the practical arrangements to be made will depend on the course writer's own situation.

Developing distance teaching curriculum[1]

In choosing what to teach a trainer is guided by what he knows of his students - their needs and interests and their background knowledge of the subject. In making such choices he will, inevitably, be hampered by the factor of distance: his first, and perhaps most difficult job, will be to discover and define the educational needs of his students and as much background information as possible about them. The distance between writer and student will affect the organization of the subject matter of a course too: it will be crucial to keep in mind the isolated situation within which students will be working.

---

1. Hitary Parraton: *The Technique of Writing Correspondence Courses* Cambridge, England: International Extension Colleges 1973.

In presenting the subject matter for correspondence students we have to be extra careful that it all makes sense and hangs together, and that it does not make unreasonable assumptions about the students' position. In school, it may not be disastrous if a curriculum is not all that well planned because the institution itself helps students to work through it. But the correspondence student is working on his own, without that kind of institutional support, and curriculum planning is therefore even more important.

Nature of the curriculum

Most of the questions about the curriculum of a course will be about subject matter and will be specific to the teaching of that particular subject. But there are three general principles which it may be helpful to follow.

First, a good curriculum will be planned so that it reflects the structure of the field of knowledge dealt with. For, as Bruner points out 'The best way to create interest in a subject is to render it worth knowing, which means to make the knowledge gained usable in one's thinking beyond the situation in which the learning has occurred. Knowledge one has acquired without sufficient structure to tie it together is knowledge that is likely to be forgotten. Organizing facts in terms of principles and ideas from which they may be inferred is the only known way of reducing the quick rate of loss of human memory'. Bruner goes on to argue for a 'spiral curriculum' in which the same concepts are presented, at increasing levels of sophistication, as children move through the curriculum.

We need to present concepts in a logical order - as we present each new one to ask ourselves whether our students have the necessary previous knowledge to understand it - but we will then find ourselves returning to the same concepts, at a higher level of sphistication, at a large stage so that the student is helped by a sense of familiarity as he grasps new interpretations of the concepts he is dealing with. In other words, a course will be easier to follow, and more effective in its teaching, if it has a limited number of themes running through it. The clearer the structure is to the student, the more helpful it will be.

Second, it is always necessary to watch that a course is gently graded in difficulty. Drop-out rates are at their highest in the early stages of a correspondence course and it is therefore crucial that students should not be faced with material beyond their ability at the very beginning. Similarly, any sudden increase in difficulty, especially before an examination, will discourage students, and a course which ends on a difficult note will inhibit students from further study. It has generally been found that courses are most successful if they increase in difficulty for two-thirds of their length and then level off.

The third general point about planning the curriculum is that each lesson must be planned so that it stands up by itself and so that it gives the student a sense of accomplishment as he works through it.

It is very easy for students studying alone to feel that they have got nowhere if they have spent a whole evening studying a single chapter of a text book - with twenty-seven more staring at them beyond that one. Studying a correspondence lesson has got to be a different sort of activity.

With these principles in mind it is possible to look at the functions of the main element in a correspondence lesson - the unit or module itself.

About the units or modules

Correspondence units or modules vary enormously in form. They may take the place of a book, or be designed for use with a book or set of books, or even be written about a subject where there are no books. Generally, they have three main functions. First a unit/module must, in many ways, take the place of the teacher: it guides the student through the material he is to study - usually through one or more text books. And, like a teacher, it shows the student how to begin his work and guides him in using the tools of the trade, whether these are text books, dictionaries, experiment kits, broadcasts or whatever. The unit also guides the student on doing written or practical work - and again we need to remember that this guidance must be fitted to the student's isolated situation. We can not assume, for example, that the jargon of a particular subject, or of the educational world, is familiar to a correspondence student in the way that it often is to a student at school or college.

Second, like a good teacher the unit needs to offer the encouragement and the emphasis which are seldom found in a text book. (Books tend to be written as if all their chapters were equally important: a correspondence lesson needs to point out and stress what is most important). And it needs to make the subject interesting and alive, even if the text book doesn't do this.

Third, where a course uses books as well as lessons, the correspondence unit may have to fill in the gaps left where the text book does not fit what the course writer wants to do.

Thus, it is not possible to give a single answer to the question 'how long should a correspondence unit/module/course be?'. To some extent the length will depend upon the relationship between the course and the text book while it will also, of course, depend on the nature of the subject matter and the amount of time the students can be expected to spend on it. Thus a short course, on a narrowly defined topic like using a slide rule, say, may need only two or three units. More advanced and complex courses may need thirty or more. The length will also depend on the written and practical work to be done by the student.

Forms of the units

The format of a correspondence unit will often be decided by the institute, or the editor, in association with the author and a suitable style will be laid down. Clearly, the more the writer knows about this

before he starts, the easier he will find it to write a course that fits with the institute's system. And, clearly the layout must vary from subject to subject and from place to place. But one thing is crucial: the format should be simple for the student to follow. It is important that he should be able to see at a glance what he is supposed to do at a particular place in the lesson. In order to ensure this it may be helpful to have symbols for particular aspects of the course, or for references to radio or television programmes. Similarly, it may be helpful for there to be some kind of symbol, or box for the student to tick, each time there is something for him to do: at the least it may help to reinforce the point that a correspondence lesson is something designed to provoke activity, and not something to be read passively.

Developing a unit

There is no one formula for writing a good correspondence unit, just as there is no one formula for a good lesson in a classroom. And the precise shape or structure of a unit will depend on the subject matter, on the previous knowledge of the participants, and on the extent and way in which the unit is integrated with other media. But it is possible to approach the planning of a unit in just the same way as one approaches the planning of a course. Thus it is necessary to define the objectives of the unit in some form or another, and the knowledge which can be assumed in the participants. Similarly, for any one unit, we can examine the resources and constraints which will determine its shape. Whatever decision we make about content and structure, most units will contain at least these four elements:

a) The lesson and number of the unit. Titles are important as they help find bearings in the course; they also draw interest to the subject matter.

b) Introduction. This is possibly the most difficult part of the unit to write especially if it is a straightforward course, without recordings or broadcasts. The introduction should contain a statement about the objectives of the lesson - not necessarily in a very formal way. But participants learn more readily, and can gauge their progress better, if they know what they are supposed to be learning. As a matter of courtesy and honesty, too, we ought to let our readers know where we are trying to lead them and why. At the beginning of the unit the student will also need advice about what sort of things he will have to do as he works through it.

c) Advice on reading. It is useful to suggest references and advance reading material for interested readers. The advice about books needs to be done subtly and to be geared to the students' isolated situation. Many correspondence students do not have access to the wide range of books normally open to pupil in school, and will probably also be in need of detailed advice about the critical use of sources. Moreover, correspondence students are likely to be discouraged by a long reading-list, especially as adult students are apt to

interpret suggestions for further study as essential reading. Thus book-lists, where offered, should above all be discriminating and of direct relevance to the course material.

d) Advice on work to be done by the student - like return of response sheets, collection of data from his own setting, etc. A unit will often include other elements too.

e) If the course is designed to be used with other media - like tapes etc. - each unit will need references to these other elements so that the whole course is integrated and the student understands how it works and how the elements fit together.

f) Almost always, there's danger that students will find some problems too difficult for them. And so somewhere in the course - perhaps in each lesson - there should be advice or reminders to the student about how to deal with problems that he can't solve by himself.

g) Generally, one will want to offer students suggestions that lead into other material, if they want to study particular aspects of a subject beyond that covered by the more formal written course. Of course there is a danger of burdening the student with too much work this way. But some leads from the correspondence unit into other directions are vital - both to offer possibilities to students who want to go beyond the confines of the course and to make the learning experience a more open one. Correspondence lessons are, by the nature of the case, pre-packaged instruction. They will be anti-educational if they imply that all knowledge on a subject can be neatly parcelled up into a single package. One National Extension college course writer suggested we should aim 'to write material that all students can get somewhere with but that some students are going to get a lot further along'.

h) Often a course will include illustrations and diagrams. The choice of these will naturally depend on the subject matter but it is important that they should be both relevant and clear.

Units are most successful where they are made personal; generally units are written in the first person and the student is addressed directly, as 'you'. Again, the impersonal style of text books is inappropriate. Obviously the tone will vary according to the level of the course and according to what is known about the students to whom it is addressed. But, whatever the course, the writer will always be faced with the problem of achieving the right balance between a too formal approach and one so informal or chatty that students may feel they are being talked down to.

Apart from being personal and friendly, writing also needs to be clear - indeed to be clearer than much spoken language and even perhaps more straightforward than the language of a text book designed for class use. The correspondence student can't ask his teacher for immediate help on the confusing passages.

Writing needs to be varied, too - something even more difficult to achieve. But if there is some variation in texture, then a course will be far more interesting to students than if it has an overall, grey, sameness about it. The variation should derive from the nature of what is being written: a lesson might, for example, open in a chatty or colloquial style but move into more subtle, more precise, and even more formal language as it moves on to discuss the complexities of the subject matter.

There are peculiar difficulties in writing the first unit of a course. Students will, at that stage, be anxious to start work on their course as soon as possible and so will be tempted to skip, or race through, a long preliminary explanation of what a course is about. And yet, without such an explanation, they may have little clear idea of where the course is leading them. Thus the first unit needs to take the student into the subject matter so that the essence of the course is clear to him from the start. This may well involve beginning the course at a different point from the traditional one in the particular subject: it may be legitimate, for example, to tell students in a classroom that they must master certain theoretical concepts before they can consider their practical application and to hold their practical interest in suspense for a week or two. But it won't work with correspondence students who will need to feel a sense of engagement with the subject matter from the beginning.

Apart from solving curricular problems of this kind, the writer will have three other jobs to do in the first unit. First, he will need some sort of statement about the content and objectives of the course, and probably a list of the contents of each unit. Second, he will need to give the student clear advice about how to use the course - the meaning of symbols used in it, advice about books and practical work, explanations of the links between the lessons and tapes if they are used and so on. And, thirdly, the writer will often want to include a diagnostic test so that the trainer and the institution, can check that the student really is capable of following it so that the tutor can begin his dialogue with the student.

The level, and wording, of this needs to be considered with especial care for students are almost always hesitant and lacking in confidence when sending their first piece of work to a trainer. It is not possible to assume, for example, that the sort of instructions which are acceptable in a classroom will be readily understood by a correspondence student, working on his own at an unfamiliar activity. Unless a student gets a great deal of help and guidance at this stage, he may never actually get started.

Try out[2]

At each stage in the process of developing or teaching a correspondence course feedback is crucial: indeed we could re-phrase the basic question as 'for which learning situation is immediate, short-term or long-delay feedback necessary?'. If we do this we may find useful pointers to the practical questions about the appropriate use of tape-recordings as compared with written material, or about the kinds of work-sheet to be offered to students, or about the frequency of contact needed between tutor and student.

The assumption which lies behind the concept of adaptive feedback is that there is seldom a single, perfect, solution to a problem; even if there is we are unlikely to find it at the first attempt. And so we can use feedback to the student in order to help him with the next stage of his work and can use feedback from him in an attempt to develop a better correspondence course at a second attempt.

If at all possible, it is obviously ideal to try a course out in a pilot form before it is finally printed. But where this is not possible it is worth looking at other forms of pre-testing. These won't be ideal as they are unlikely to reproduce the real situation of the home student but they are better than nothing.

First, it may be possible to try out parts of the material on students who are willing to act as experimental participants. They might be children at school, or adults in an evening class or correspondence students on some other course.

Second, criticism of draft material can come from colleagues - indeed it is bound to come if a team are together working on a course.

Third, where possible, it is an advantage to bind or staple only about the first six months' supply of a course so that minor improvements can be added after the first reactions from students are in.

Use of feedback

This assumes, of course, that the writer will find out how students get on with his material. There are four things needed here- four refinements to the simple feedback loop which are worth setting down.

a) The course writer needs to act as trainer to some students in order really to see how they get on.

b) Often he won't be tutoring all of them so that there should be some system to get reactions from the other trainers - by meeting them, or by looking at their work, or by getting them to comment in writing from time to time.

---

2. This section is an abridged and edited form of chapter six from Perraton (1973)

c) Trainers and institutes need some system to store all this information so that it doesn't get lost and can be used when it is time to revise a course.

d) A course needs to be designed so that worksheets, and meetings with students, do show where the course is failing and where it is succeeding.

The cyclical view means that a correspondence course writer cannot breathe a sigh of relief once his course is written, knowing that the rest will be dealt with by the training institution. (His job is not like that of an author whose second edition is seldom very different from the first and, even where it is, is more likely to be modified; beause of changes in his subject matter than because of feedback from his readers). Rather we hope that the relationship between the writer, the course, and his students may be a long-term one - hopefully to the advantage of all three.

Supplementing distance training

Most of the distance teaching material use so far information presentation, self-assessment and feedback and assessment by tutor and feedback methods. Continuous presentation of information in a unified style may kill the interest of learners. Wherever possible there should be illustrations. The illustrations and exercises may take various forms. The following forms of materials may be used.

1. Case studies: The distance teaching material may include case studies illustrating the concept about which content matter has been presented. For esample, a unit on institutional planning may contain a sample of institutional plans. A unit on personal management may contain examples of how personnel management is being effectively handled in a school. Alternatively cases may also be used to develop analytical and application abilities.

   For example after a unit of performance appraisals, the participant may be given some data about an institution and asked to develop a performance appraisal system for that organization. Or after a lesson on leadership qualities, a few cases may be presented and the student could be asked to identify leadership qualities in each of these cases. His responses can be recorded in a workbook and the tutor can test his learning and offer comments. Cases may have very high value in distance teaching for education managers for their practicality.

2. In-basket: In-basket exercises could also be included in the teaching materials. However wherever they are included answers should be developed and should be made available to the tutor. Alternatively analysis of the in-basket may be presented in the book itself for the learner to mark his own answers. One limitation of using this technique in correspondence education is that the trainer has no control over

the time limit imposed on the learner to do the exercise. It has to be left to the learner. However, in-basket can have tremendous motivational value for the learner to learn at his own pace.

3. Audio tapes: Using audio-tapes is another way to make distance teaching interesting. It may not be difficult for most educational administrators to have tape recorders. Schools have these and education supervisors can purchase them. In view of this facility that exists in schools it may be useful to produce taped lectures or programmed material for better learning. Such tapes should deal with less technical subjects as there may be communication problems in communicating technical topics like student flow analysis, PERT, etc. through tapes.

4. Student initiated discussions and get-together: When a number of learners participating in distance teaching come from the same town or city, it is possible to have them meet once in a month or fortnight to discuss whatever they learnt or about the unit they completed. Such periodic get-together by the participants develops group spirit and mutual support may develop. When such support exists they may even be encouraged to try out or experiment with some of the ideas they learn. Wherever possible a trainer from the distance teaching unit can also visit each town periodically, understand their problems and conduct brief sessions. There could be a mobile training unit from the training institution to go round conducting supplementary programmes. The training unit may be equipped with films and other audio-visual aids.

5. Field trips: Field trips to model schools, districts, schemes, etc. could be arranged whenever an appropriate unit is being taught. For example if a particular school has done excellent work and it is considered as the best school in its lay out, planning, management and community support, after teaching the units on school management the participants could get together at the place where the school is located on a specified day or they can visit the school in groups and make a study report.

6. Contact sessions: From the Greeks onward, face-to-face communication has, almost always, been regarded as the normal way of learning or teaching. And it has been regarded as the best way - so much so that only recently have educational theorists begun to define the roles which are particularly or even uniquely appropriate for face-to-face communication.

Two characteristics should control its use in a learning situation. First, face-to-face communication between a student and a teacher is very expensive: most of the others we have discussed make more efficient use of manpower. Second, it is uniquely valuable only where the numbers of people involved are so small that the behaviour of the teacher can be modified by the reactions of his students. After

all, in a classroom situation, pupils are largely dependent, both for information and for inspiration, on the highly individual skills of their teacher. When teachers are overworked, inadequately trained and badly equipped, as they often are in many parts of the world, the advantages which we associate with face-to-face teaching are effectively lost. There is no inherent merit in the lecture to a large audience and no evidence to show that this is a superior way of teaching than say, radio or television.

Face-to-face communication may have psychological advantages over other media for some students in encouraging them to learn or motivating them to start learning. (For other students, broadcasts or even correspondence lessons may in fact be superior). But there are two ways in which face-to-face teaching has inherent advantages. First, in a small group of people with a teacher, it is possible to base decisions about what should be taught much more closely on the needs and priorities of the students. Our distance teaching system needs to do this in any case but it can be achieved far more readily in a face-to-face situation.

Similarly face-to-face instruction has a particular value in dealing with students' individual difficulties. Secondly, in a face-to-face situation there should be immediate feedback between teacher and student: both should contribute to the dicussion. This opens up the possibility of changing the direction of the dialogue altogether: if people are learning together they may choose to explore an aspect of a subject which had not been foreseen beforehand - again something at present impossible through any other form of communication. Thus face-to-face teaching can be more open-ended than teaching on paper or through the air. In practice, of course, it may not be. But in choosing between media it is these qualities - of adaptability and openness - which should guide us in our use of face-to-face instruction.

Finally there is one quite different aspect to face-to-face communication. Where students live close enough to each other student group meetings can be of very significant value in learning. There is some evidence to show that students can learn as well in groups without a tutor, jointly following a broadcast or a correspondence lesson, as from a tutor. Certainly they can help each other enormously with each other's difficulties and, of course, can overcome some of the correspondence student's feeling of isolation. And the use of group meetings enables educators to work through the existing networks, and patterns of leadership, in the communities with which they are concerned.

Preparing books and other material[3]

Every student learning by correspondence has two tutors: the writer who prepares the correspondence lessons and the tutor who

---

3. This section is an abridged and edited form of material from *"Teaching by Correspondence: A Guide for Writers"* Dar Es Salaam: National Correspondence Institution, Institute of Adult Education, 1974.

corrects and comments on the student's written exercises. Every correspondence course reflects the initiative and originality of the teacher who writes it.

The author may use special methods of motivating students, and keeping them interested by active participation in a series of tasks which will help them to learn. The authors may not always belong to the training institution. Therefore enough efforts should be made before the lessons are written to ensure that the author is clear about the task. The following steps may be followed:

1. A meeting with the Head of the National Correspondence Institution and/or the Editor or the Co-ordinator of the programme. During this meeting among the matters discussed will be:

a) The purpose of the course.

b) The educational level of the students and their aim in taking the course.

c) The definition of the syllabus.

d) Possible methods of dividing the syllabus into units of presentation.

e) Suitable techniques for teaching by correspondence for each.

f) A suitable format for the course.

g) The kind of stationery to be provided to the students as most suitable for the subject. Any specially designed stationery which might be necessary.

h) The National Correspondence Institution's facilities for production and printing so that you can plan your presentation to make use of illustration.

i) Plans for supplementary systems like radio, recorded tapes, student meetings, face-to-face discussions, etc.

j) A time-table for writings, editing and try own.

2. The writer of a correspondence course may plan his instruction as a face-to-face instruction is planned. He will look at the entire syllabus, and divide it into small, easily digested portions of learning, which will lead the student in easy, graded steps from the known to the unknown. Usually this division can be based on topics within the syllabus.

Each portion, or unit, of presentation should occupy the student for about two weeks. A course which is given by class instruction in one academic year usually divides into about 20 units for instruction by correspondence, but the exact number depends on the best educational division of the subject content into units. Every unit will contain some exercise/exercises to be worked by the student and sent to his tutor for correction and comment. Division into about 20 units gives contact with the tutor about every two weeks. Some courses which are shorter courses can be presented in fewer units.

3. The exercises given to correspondence student must be prepared as aids to his learning. They should

a) help him understand and remember the facts he must learn.

b) give him practice in the skills he must gain.

c) make him apply knowledge and skills so that his tutor can diagnose his progress after each unit.

4. There is no fixed rule about the placing of exercises in a correspondence unit. To place them progressively throughout the unit ensures the student's active participation in 'doing' as well as in 'reading', and the 'doing' will help him learn. In some units, however the nature of the content may require the placing of all the exercises at the end of the unit. The teacher may decide in planning each unit at what points he will put exercises, and what kind of exercises he will use.

5. Self-check objective tests. At the end of a section of instruction within a unit a self-check objective test can be included. It should be introduced by an explanation to the student that the test is included to help him LEARN, and that he will lose this help if he either omits the test, or looks at the answers, before he has worked the test. The answers should be placed at the end of the unit and the student told where to find them.

Self-check tests will make the student rethink what he has learned in a section of the unit, and the answers will give him immediate reinforcement, so that he can check, and correct any misunderstanding. A correspondence student will soon learn to appreciate the helpfulness of self-check tests. These tests should be introduced by a simple, clear instruction, for example,

> "In the spaces given write down NOW the answers to the following questions. As soon as you have finished turn to the end of this unit, find the answers to this test, and check your answers. If you have made any mistakes study again the part of the unit on which the test is set to find out why your answer is wrong".

Self-check objective tests must be very carefully designed. Monotony will kill motivation if the same kind of test is repeated too often. Therefore as wide a variety of tests as possible should be used, for example, completion, multiple-choice, true-false etc. The kind of test used on each occasion will, of course, depend on the kind of the material to be tested. Care must be given to choose the most satisfactory type of text on each occasion.

Self-check objective tests should be used only when there is only one correct answer possible, unless you make a list of all possible correct answers and print them in the answer section at the end of the unit following the statement "Any one of the following answers is correct".

Great care must be taken that the numbering of the questions and answers is consistent in method and is accurate.

The quickest and easiest way to ensure satisfactory self-check tests consistantly numbered is to prepare the questions and answers at the same time. The answer page can then be set aside to be attached at the end of the unit.

6. Assignments to be returned for correction and comment. The institution is required to supply its students with stationery. Therefore with every unit of work a Work Book or response sheets should be enclosed in which the student writes the answers to exercises which he sends to the tutor for reading, correction, etc.

The purpose of these prescribed assignments of written work is to give the student the opportunity of applying the knowledge and skill he has been taught by the correspondence lesson. The standard of his work will show the tutor if he has been able to understand and apply the content of the lesson, or if he needs extra help through individual comments written by the tutor in the Work Book.

Sometimes all the exercises for the student's written assignment will come at the end of the unit. Usually, even when some are placed at various points throughout the unit, there is one final exercise at the end which will require him to apply to it the knowledge and skill he has learned from studying the unit as a whole. This final exercise should be a diagnostic exercise which will show if the student has understood, and can apply, the knowledge and skill the unit has aimed to teach him.

No exercise should be given which can be answered merely by copying out a passage of the unit or a book. Such an exercise does not test the student. Questions which can be answered by only one correct word should be given in the self-check exercises within the unit. There is no need for a tutor to mark answers which the student can correct himself.

Unnecessary, repetitive exercises should not be given. A correspondence student has to do more reading and writing than a student receiving face-to-face teaching, and he should not be burdened with unnecessary work.

7. Format of work books. In advanced courses in which assignments usually require essay answers students are supplied with work books containing pages ruled for writing. The questions, or exercises, are printed in the unit of which they are an integral part.

8. Marking scheme. It is useful to have a marking scheme. It helps the learner to look at his progress. Therefore it is advisable to allocate to the exercises in each unit, which are to be sent to the tutor for correction, a total of 100 marks. This total for each unit will establish uniformity between units without the necessity of converting the marks for each unit to a percentage. Uniformity of the total marks for each unit also makes possible an assessment of the

standard of a student's progress from unit to unit.

The printing of the marks allocated to each exercise shows the student the relative value of the exercises in a unit. It also provides the basis for uniformity of marking when large numbers of papers in the same subject must be marked by a large panel of tutors.

When allocating marks between the exercises in a particular unit please weight the exercises according to their relative value.

For writing a course which uses a specially designed work book for each unit the following methods may be used in preparing the manuscript for the work book for each unit:

a) Place and number the exercises in the order in which the unit requires the students to work the exercises.

b) Give before each exercise complete and clear instructions about how the exercise is to be worked. In many cases it will be necessary to show how an exercise should be worked by one example. This example may have been given in the unit, or it may be better placed in the work book. Its best position will be a teaching point for your decision as the teacher.

c) Leave space after each exercise equal to the number of lines, or pages, which must be given to the student to write his answer. In calculating the space allow for large-handwriting. It is better to over-estimate the number of lines an adequate answer will need.

d) At the end of the space for the answer write in the right-hand margin the total mark allocated to each question, or exercise.

e) Draw a frame of suitable size for printing in the work book if the answer asks the student to draw a map, diagram, or chart. Show above, or below, the frame the title for the answer. Be sure that you keep your frames within the page size for the course you are writing. The format will vary with the content of the course, because each subject will be printed in the format which gives it the best presentation.

9. Experience has shown that a part-time writer can complete the writing of at least one unit every two weeks. A full time writer can usually produce at least one unit each week. Rate of progress depends to some extent on the subject and the amount of reading and research a writer must do in preparation. To write and print a correspondence course of one subject containing instruction for one academic year takes an average time of about one year.

It is useful to arrange a meeting between the authors, tutors and editors after the first one or two units are written to establish a common understanding and orientation.

Preparing exercises[4]

The form and kind of exercise given in a correspondence course should vary as much as possible to avoid monotony, and to hold the student's interest. The following are some suggestions.

1. Not all exercises take the form of self-check tests or exercises to which answers must be written in the work book. If the student must read a lengthy passage either in a book, or in the correspondence unit, it is advisable to ask him while he is reading it to find short answers to some simple questions, and to write them as soon as he has found them. The questions should be so arranged that the student finds the answers progressively as he reads. The student could check himself whether he has found the right answers. In such case it is advisable to leave enough lines for him to write the answer in the unit below the passage he is to read, and give the answers at the back of the unit.

If it is necessary for the answers to be checked by the tutor the student may be instructed to write them in the work book, in the numbered space provided. Giving the student this small task of simple research will help both to hold his attention, and fix it upon points he must understand and remember. The action of writing the answers on paper will help to "write" them in his memory. Also by skilful questions well arranged you will be guiding the student in making a summary of what he is reading.

2. The same results as in (1) can be gained in some units by asking the student to make a list of certain facts, or reasons, or results, or events, which he will find in a passage he is asked to read.

3. When the student has been guided in earlier units by (1) and (2) how to make a summary, he can be asked while reading a passage to make a brief summary of what he is reading, but he must have been shown by example how to make a brief summary. A passage for reading should be given with a summary of it arranged in note form under a main heading and sub-headings. The functions of these headings should be pointed out in a written and illustrated discussion of the method of making a summary. The student should be asked to note the difference in length between a brief summary containing the key points of the text and the original text. He should then be asked to write in his work book, a summary of another passage, because his first attempt at a summary will need checking by his tutor. When the student by progressive steps taken through the exercises of several units has learned how to make a brief and accurate summary, he will have learned a very useful study technique.

---

4. This section is an abridged and edited form of material from Government of Tanzania (1974).

4. A correspondence student should never be referred to a book or any other sources which he may not have. This type of exercise can be given only when you know that the student will have the reference material in his possession, and very often this certainly requires the reference material to be included in the correspondence course unit.

5. Sometimes a student can be asked to add information found in the study material to a prepared chart which is sent to him.

6. Frequently the student himself can be involved in a 'real life' problem for which he finds the solution by applying the knowledge he has learned in the unit. For example if a correspondence unit is teaching the meaning and process of making a budget the student can be asked to write for himself a budget to live for a certain period of time on a realistic number of dollars. His personal involvement in this exercise will make it more meaningful and more interesting to him.

7. Case studies provide material for realistic and valuable exercises.

8. Practical exercises can be given by asking students to collect and send to their tutor information about their administrative settings and their diagnosis.

These few suggestions about the kinds of exercises useful for correspondence students are suggestions only. The teacher and course writer, will have many fresh ideas for interesting and varied exercises which will help the student to learn not only by concentrating his attention, but by teaching him good study techniques. It is boring for students to read a booklet about study techniques. Indirectly, they can be trained in a good study techniques and habits by the kinds of exercises they are asked to work. Their correspondence course should teach them how to study as well as what to study.

The designing of well chosen, purposeful, exercises is one of the most challenging and interesting aspects of writing a correspondence course.

Editing distance training material

All persons employed in the editorial section of an institution teaching by correspondence must be competent to take responsibility for the accuracy and satisfactory presentation of the study material issued by the institution in its correspondence courses.

The editor's duties are those of a co-ordinator - to co-ordinate the facts provided by the experts - the writers and illustrators, with the proper language and style, with the pedagogical method employed, with the technical conditions laid down by the format, lay-out, production and finance.

If a correspondence course is to achieve its planned objectives the editor must understand the student body for whom the course is being prepared. The editor with the writer must be able to assess the educational background of the prospective student body, and define what its terminal behaviour should be when it has completed the correspondence

course.

Editors must be persons able to work continuously with close concentration and meticulous care over detail.

The editor's duties in an institution teaching by correspondence are to:-

1. brief prospective writers;

2. plan with newly appointed writers, the Head and/or Supervisor of Educational programme, Radio tutor, subject supervisor and illustrator, a suitable format for the presentation of the particular subject to be taught;

3. plan a lay-out which will help the learner;

4. arrange for the illustration of correspondence courses;

5. read promptly the first unit of manuscript delivered by a writer, and discuss it with him to give encouragement, bring about improvement, and remove any unsatisfactory features.

6. ensure that the text and exercises are written in simple language within the students' range of understanding, and without any possible ambiguity;

7. ensure adequate and effective assignments of work for the student without unnecessary over-loading;

8. ensure that students are given detailed instructions about what they are to do. It must be remembered that correspondence students can not ask questions about how they are to attempt and set out their exercises. They must be given clear and complete instructions sometimes with demonstration by a worked example;

9. arrange instruction from unit to unit, and from step to step within each unit, in such a way that it takes the student in easy steps from the known to the unknown;

10. ensure that a simple definition is given of each new term as it is introduced - often this can be achieved by introducing it within a context which defines it;

11. ensure that all illustrations are educationally accurate, not over-loaded, and clearly and correctly labelled, using the same terms as the text which they illustrate. Each illustration must teach its point clearly and emphatically;

12. encourage writers and illustrators to contribute fresh ideas for techniques of presentation, so that the students' motivation and active participation will be sustained;

13. contribute from cumulative editorial experience to the production of lively varied correspondence lessons - monotony must be avoided;

14. ensure meticulous care in proof reading, and in marking, and checking corrections;

15. record immediately any amendments, or modifications to be carried out at the time of the next printing, and to ensure that these alterations have been made in the copy.

The editor should work with the writer on the first unit of manuscript until it is acceptable as a satisfactory teaching instrument. This work includes the preparation of any self-check exercises and their answers included in the unit, and the assignments prescribed for the student to work and post to his tutor for correction and comment. All text, exercises, and assignments must be prepared together as integral parts of the one instrument of teaching and learning.

The relationship established at the beginning between the editor and writer is most important to the production without difficulty of a good correspondence course. Both must understand its objectives, and each must understand his part in mutual co-operation to achieve those objectives.

Some writers, particularly experienced teachers, will produce satisfactory correspondence courses without much work on the part of the editor, but others, with a sound knowledge of the technical content of their subject but no teaching experience, may have great difficulty in presenting it.

Editors with a cumulative knowledge of the techniques of teaching by correspondence must contribute from this knowledge to help the writer to use these techniques. This help given in the initial stages will save both the writer and editor much time later in making remedial revisions. Preventative action is better than remedial action which is frustrating to both writer and editor.

It is most important that, having established a relationship of mutual co-operation at the beginning of the writing of correspondence course, the editor should continue to work with the writer throughout, so that he progressively edits the manuscript as he receives it, and the writer knows he is editing it. This will encourage the writer to continue steadily with the writing as per the course outline. When the writers think they are delivering manuscript which no one is working on, they do not feel the necessity of continuing to write at a steady rate;

The editorial work in an institution teaching by correspondence is of great educational responsibility. It requires a team of competent people. Each writer is writing a correspondence course in a subject in which he has special knowledge. Each person editing correspondence courses will be working continuously with writers on several courses. He may not have a knowledge of the subject content, but if he can not understand the writer's instruction the student will not understand it. It will be his responsibility in consultation with the writer to improve any unsatisfactory presentation. Each editor must take full responsibility for the courses allocated to him.

One person in the editorial team will be responsible for the organization of the section and the allocation of courses to individual editors.

Partners in distance training

The students and the resource people (trainers or tutors) are the two important partners in distance training. Their respective roles are critical for its success.

The students: The work done by students in connection with a correspondence course may be of three kinds. First, they may do practical work which is related to the course but not closely tied to it. A correspondence course on institutional planning may require the participant to collect a variety of statistics and data about his own institution and prepare school plans using guidelines suggested by the book. Second, participants will do some work for a tutor to make and comment on, while thirdly, they will do some for self assessment. It is here that the course writer's job is strikingly different from that of a teacher in a face-to-face situation for he needs to work out in advance, and in much greater detail, the kinds of activities that his students should engaged in. And so, in writing his course, he is asking questions about the kind of activity which will help his students to learn as well as the more familiar questions about the subject content of his course. It may even be worth working out the curriculum in terms of what the student is going to do - and write the narrative, teaching, text afterwards.

In choosing what sort of work should be set for students, the course writer usually has to strike a balance between a number of educational and other pressures. On the one hand a flow of written work between student and tutor helps to make their relationship a more personal one, and so hopefully a more useful and encouraging one. But this inevitably costs money and introduces delays. The delays may be of very great significance educationally. And so questions about timing as well as about costs will determine the frequency with which students are asked to send written work to their tutor. It is at this point that the constraints on what can actually be done force the course writer into difficult comparisons between alternative methods of achieving his, and his students' objectives.

Decisions about which work is to be marked by the student, and which is to be sent back to his tutor, will depend very largely on the subject matter, but it is appropriate, at this point, to put in a general plea that questions to students should be as open-ended as possible. The plea is made both in the hope that writers will want to respect their students' intellectual dignity and because it may be one way of avoiding the over-didactic approach, the greatest danger for course writers. It is also worth stressing that a worksheet does not necessarily mean a list of exercises for the student to do after he has worked through the lesson. It will almost always be better if the worksheet consists of separate bits of work which the student does as he works through the lesson, but sends to his tutor at the end.

Finally, it is possible to distinguish five different functions for worksheets (i.e. work done by a student for his tutor).

a) First, worksheets should help learning. One of the major functions of all written or practical work to be done by the students - in contrast to their reading - is to help learning, often by making students use the information they have just encountered.

b) Second, worksheets enable the student and tutor to build up a dialogue. This should make studying at home more interesting and enjoyable. And it means there is someone to whom the student can turn for help, and someone who can adapt the course, at least a little, to the individual needs of students. Worksheets should therefore be designed so that they will bring into the open, and to the tutor, the student's difficulties.

c) Worksheets enable the tutor to check the student's progress through the course and the extent to which it is at the right level for him. And, of course, to correct errors if they occur, or to clarify misconceptions.

d) Worksheets ought to encourage the student. The National Extension College India has found that students regard them as more important than they really are. But as a result, they get a great deal of encouragement from successfully completing a worksheet and getting it back marked.

e) Finally, worksheets provide the tutor and the course writer with feedback on the course itself. The students' reactions to the worksheet should provide a check on how well the course is working out.

The resource people[5]

The distance tutor is the personal tutor allocated to a group of correspondence learners to bring into the teaching the more personal element which is to a great extent absent in a "pre-packaged" course.

There are several different and contrasting traditions in correspondence education in the role or in the practice of this figure, with certain kinds of courses or of course objectives (such as with revision or with some forms of in-service training) where it is possible dispense with the tutorial element. The different traditions reflected in the alternative labels given by different colleges or units, in different countries, to someone who is basically a study counsellor. These titles include "marker", "examiner" and "instructor".

If the "marker" or "examiner" is concerned mainly with the evaluating of student work, either in order to stimulate and help the learner to assess his/her own progress, or for a final assessment of student performance on the course, he might also be expected to give instruction to the student. Sometimes the marker is expected only to

5. This section is an abridged and edited form of material from Harris and Williams. "A handbook in distance education". Manchester monograph 7, 1977.

pronounce a bare judgement and to allocate a mark. The study advice and detailed commentary is then left as the duty of the study counsellor or student advisor.

In courses dealing with skills which are largely practical, the place of the latter "teacher" may be taken by the foreman or office supervisor at work. In more scholastic courses it is strongly recommended that where there can not be any local (face-to-face) group teacher nor local supervisor for correspondence education there should be a system of individual tutoring "at a distance", by letter or by "tutor's comment forms" or by written sentences on the student essay or answer-form. In some countries this tutorial comment may be by audio-cassette or by telephone.

The markers, with only limited tutorial duties or none, are usually part-time employees, and can be recruited locally to economize on postage and travel costs, but they can (in a country with good communications) be living at a distance from the college to which the student work is sent. The distance tutor, with the opportunity for full personal guidance of the student by correspondence, is often (in the early days of a new course) one of the full-time staff and may be a course writer or editor or tutorial supervisor.

As course students become more numerous, the tutors may be employed part-time and may be recruited for this purpose from amongst suitable administrators, or managers, ex-managers, specialist professionals, (not teachers) or other educated people judged to be suitable. The practice varies in different countries and in different institutions. It may seem obvious that such tutors should be sympathetic to the isolated learner, should know the subject well and should also be able to teach through well-expressed, brief comments on paper. This is a special skill to be learnt by experience.

Many colleges issue a pamphlet or handbook to guide and to advise their part-time tutors, or arrange interviews for new tutors with the tutorial supervisors. Some will arrange conferences and shorter meetings for tutors, to co-ordinate, stimulate and improve such tutorial service. To summarise the complex nature of the tutorial role where a full tutorial system is operated, the tutor should be:-

a) "a supervisor or counseller for the do-it-yourself learner", also

b) "an assistant for the course writer", interpreting the course to the individual.

c) and "a full partner in the educational process", with a positive and independent contribution to make to the teaching.

As with class teaching, every good tutor will develop his own individual style. The distance tutor is "the voice and the personality of the correspondence method", and "it is primarily on the tutor that the method ultimately depends for its efficiency and its humanity". The course is written for <u>all</u> students who <u>may</u> be taking the course in the future, while the tutor is writing to the individual who has actually

enrolled.

Perhaps it is misleading to think of the different elements of a correspondence method in isolation from each other. The writer (or writers) of a course, the course editor, the illustrators and the tutor are all part of a system, at their best all working together as a teaching team. A wider, and possibly more accurate way of looking at the technique of correspondence education is to regard it from the learning end: the final product and objective. Then the students also become a potential partner and contributor in the process as the home-learner and, to some extent, as self-teacher.

Student activity (and the stimulation of student active participation) is important. There are no fewer than five functions for the student worksheet - in which both tutor and prepared course play a part. As suggested these should first "help learning", secondly they "build up a dialogue", thirdly they "check the student's progress" for the tutor. As a fourth and fifth function the worksheets "ought to encourage the student" and "provide the tutor and the course writer with feedback on the course itself".

Overall planning of a course using correspondence and other distance media will, like the planning of any educational activity, necessitate giving careful thought to the objectives of the course. These, as Perraton stresses " are likely to be narrower and more specific than the needs it serves". Until the course objectives are clarified, and until the available resources (in other media, in numbers of tutors, and in experienced personnel) are surveyed, there is no criterion to guide the college in the detailed construction of its lessons and techniques. It is thus imperative, to prepare and to test in advance the details and the whole sequence of teaching, and to try to anticipate the learning response, that is the particular distinguishing element of all distance educators.

Organizing a correspondence unit

The following points may be considered for organizing a correspondence unit:

1. Correspondence education is a continuous activity. It requires full time attention of people. The first decision to be made in organizing a correspondence unit is its location. It is always useful to attach a correspondence unit to an educational organization or a training institution. This is because academic institutions are best equipped for technical supervision which is a very important aspect of correspondence education. The training institution should have some facilities in terms of a good library, faculty, typing and other infrastructural facilities. The training institution should also be dealing with educational administration. This makes their job easier.

In case no such training organization is available, a special cell may be created in the Ministry of Education or an appropriate department with few full-time trainers. Such a cell should have autonomy and should be manned by people with academic orientations.

2. The next step is to locate resources. The following resources will be required.

a) Manpower resources including book writers, editors, tutors, trainers in contact sessions, support staff for typing, printing, mailing, record keeping, etc.

b) Material resources including stationery, printing machines, zeroxing machines, cassette recorders, films, etc.

c) Infrastructural facilities like classroom, auditorium, hostels, library, etc.

If the unit is located in a training institution, the infrastructural facilities may be already available. However, costs for manpower and material resources need to be built into the budget.

It may be useful to use the trainers themselves as writers. There are several advantages if the writers of the correspondence units, the tutors and the trainers are the same set of people. However, such a combination may be unusual. Particularly if a big number of candidates are going to be covered, a tutor may not be able to handle more than a group of 30 or 40 if he has to attend at the same time to other tasks. So it may be necessary to prepare a separate group of tutors.

The editors may be technically trained in editorial capabilities for distance teaching materials. Those trained in self-instructional materials would be able to take care of this job. They should be familiar with principles of learning and presentation techniques. The trainers could be those who take active part during contact programmes or the trainers may go beyond what has been given in the correspondence units.

In order to make the training interesting and provide an opportunity for the participants to see the application opportunities, the trainers should prepare case materials of experience available and use them in contact sessions. Thus the trainers are likely to be busy collecting teaching materials, conducting research and evolving materials that could be incorporated into the correspondence units later.

The unit writers are likely to be subject specialists drawn from fields like financial management, policy analysis, social economics, organizational behaviour, scheduling techniques, personnel management, etc. The training institution may not be equipped with all specialists. Even if it is, it is useful to have a list of specialists on whom the institution can bank on for preparing materials.

3. Another important aspect to which enough attention should be paid is the production of material. The material should attract the readers to use them and not create repulsive feelings. This can be ensured by neat printing and presentation. Printing mistakes, improper presentation, etc. may reduce the motivation of learners by communicating non-seriousness of organizers.

4. Establishing a correspondence unit takes time. It is not advisable to jump into production of materials in the first year itself.

Testing, revising and finalizing for the first round itself may take about two-three years. The scheduling may be something like this.

First year	Senior staff decide on initial courses through consultation with relevant bodies.
	Course writers are appointed and trained; courses are written (pilot version).
	Permanent accommodation is sought and skeleton administration is set-up.
	Basic student record procedures are prepared.
	Potential tutors indentified.
	Sources and channels for enrolment are identified.
	Initial publicity made.
Second year	First courses run, tested and revised.
	Revisions made to administrative procedure.
	Large-scale publicity and enrolments.
Third year	Full-scale courses.
	New courses planned, written, tested, revised.
	Administration enlarged to cope with increasing enrolments.

5. Students have to be enrolled for correspondence courses. There are some unique aspects for educational planners and administrators. The participants are generally busy people. Since they have day to day problems in their administrative work they are not likely to get enough time. If they do not see any immediate use of their learning, their motivation to enrol may still be low. Therefore, it is necessary to build incentives. The training institutions have certifying arrangements. The certificates of completion of correspondence units should be given weightage in promotions. Thus before the programme is launched the ministry of education or the department concerned should adopt a clear policy.

Once such a policy is adopted enrolment may take the form of nominations by higher authorities or self-initiated enrolment. If enrolment is left for the initiative of the participants, information should be sent through a circular latter to all potential participants. If higher enrolemnt than the unit can handle is expected some stratification may be done and only limited group of participants may be informed. In any case a clear understanding with the higher authorities of participation should exist so that the participants are given all support by their higher authorities.

6. Some form of assessment should be developed. The assessment becomes important if the performance of the participants is going to be taken into account as a part of his annual appraisal.

Distance training as a method of training education managers and planners is being increasingly used in the region. The Unesco Regional Office for Education in Asia and the Pacific has used distance teaching materials in its own training courses in educational planning and management for a number of years. Since then a number of countries have adapted these materials, and developed some on their own. Some experiments are being done in this field. It should prove valuable to use and improve the available material.

REFERENCES AND SELECT BIBLIOGRAPHY

1. American Management Association. *Making the most of training opportunities.* New York, 1965.

2. Arends, R.I., Jane H. Phelps and Richard A. Schmuck. *Organization development: building human systems in schools.* Eugene, Ore., Centre for Educational Policy and Management, 1973.

3. Ashall, R.D. *Participative exercises for management training.* Scranton, Pa., International Textbook, 1969.

4. Beckhard, R. *Organization development, strategies and models.* Reading, Mass., Addison Wesley, 1969.

5. Berger, M.L. and P.J. Berger. *Group training techniques.* Boston, Mass., Gower Press, 1972.

6. British Institute of Management. *Making management development effective.* London, 1965.

7. British Association for Commercial and Industrial Education. *Three case studies in management and supervisory training.* London, 1969.

8. Chau, T.N. *Recent changes in the training programme of the International Institute for Educational Planning.* Paris, IIEP, 1976.

9. Craig, R.L. and L.R. Bittel, eds. *Training and development handbook.* New York, McGraw Hill Book Company, 1967.

10. Cuvinusart, B. *Staff training in a period of change in the administration of education.* Paris, IIEP, 1976.

11. Fox, R., M. Luszhi and R.A. Schmuch. *Diagnosing classroom learning environments.* Chicago, Science Research Associates, 1966.

12. Garbutt, D. *Management training needs: a typology.* New York, Management Education and Development, 1972.

13. Hamblin, A.C. *Evaluation of training programmes.* Madison, American Society for Training and Development, 1975.

14. Harris, W.J.A. *The distance tutor.* Manchester, 1975. Monograph 3.

15. Harris, W.J.A. and I.D.S. Williams, *A handbook on distance education.* Manchester, 1977. Monograph 7.

16. Havelock, R.G. *The change agent's guide to innovation in education.* Educational Technology Publications, Englewood-Cliffs, N.J., 1973.

17. India. National Institute of Planning and Administration. *Goals and theories of education in Asia: a select bibliography.* New Delhi, 1978.

18. _____. *Orientation course for university registrars: reading material.* New Delhi, 1978.

19. _____. *Orientation programme in educational planning and administration for senior school administrators; a select bibliography.* New Delhi, 1980.

20. _____. *Second correspondence course in educational planning and management: report.* New Delhi, 1980.

21. _____. *Second correspondence course in educational planning and management: summaries of term papers.* New Delhi, 1980.

22. _____. *Seminar in school management for principals of secondary schools: reading material.* New Delhi, 1979.

23. _____. *Training programme in financial management for finance officers of universities in India: reading material.* New Delhi, 1979.

24. Indian Institute of Management. *Management of inservice training: case studies.* Ahmedabad, India.

25. _____. *Management of support systems: case studies.* Ahmedabad, India.

26. International Co-operative Alliance. Co-operative Educational Materials Advisory Service. *Correspondence education: a guide for planners, course writers and tutors.* London, 1977.

27. National Correspondence Institution. *Teaching by correspondence: a guide for writers.* Dar Es Salaam, Institute of Adult Education, 1974.

28. Pareek, U. "Process management of learning", in *Learning systems: readings.* New Delhi, 1977.

29. Perraton, H. *The technique of writing correspondence courses.* Cambridge, International Extension College, 1973.

30. Pfeiffer, W.J. and J.E. Jones, eds. *Annual handbook for group facilitators.* San Diego, Calif. University Associates, 1971 to 1980.

31. Philippines Ministry of Education and Culture. Planning Service. *Correspondence course in educational planning and management: reading material.* Manila, 1979.

32. Prahlad, C.K. *Christian Medical College and Hospital, Vellore.* Ahmedabad, India, IIMA, 1980.

33. Schmuck, R.A. and P.J. Runkel. *Handbook of organization development in schools.* Eugene, Ore. Centre for Advanced Study in Educational Administration, University of Oregon, 1972.

34. SEAMEO Regional Centre for Educational Innovation and Technology (INNOTECH) *Self-instructional modules.* Quezon City, Philippines, 1977.

35. Shrestha, K.N. *Identification and development of training needs in educational planning and management for Nepal: a research report.* Kathmandu, Institute of Education, Tribhuvan University, 1980.

36. Tracy, W.R. *Managing training and development systems.* New York, AMACOM, 1974.

37. Turelker, P.A. "Designing simulation systems", in *Introduction to the systems approach.* Englewood-Cliffs, N.J., Educational Technology Publications.

38. Unesco. *Basic training programme in educational planning and management: correspondence materials.* Bangkok, ROEAP, 1980. 7 books.

39. _____. *Continuing education for teacher education: handbook of suggestions for organizing advanced level workshops.* Bangkok, APEID, ROEAP, 1978.

40. _____. *Developing instructional modules for teacher education: selected exemplar modules.* Bangkok, APEID, ROEAP, 1978.

41. _____. *Development and testing of national training material in educational planning and management; report of a consultative meeting.* Bangkok, ROEAP, 1980.

42. _____. *Final report of the seminar on the training of specialists in educational administration and planning: evaluation and prospects.* Paris, IIEP, 1973.

43. _____. *Policy studies in Asia: the training of educational personnel.* Bangkok, APEID, ROEAP, 1979.

44. _____. *Population dynamics in educational planning: a training handbook.* Bangkok, ROEAP, 1980.

45. _____. *Regional technical co-operation for training educational personnel in planning and management using distance teaching and other techniques; project document.* Bangkok, ROEAP, 1977.

46. Weiler, H.N. *Changing concepts and practices of educational planning: implications for training.* Paris, IIEP, 1976.

47. Yow, C.T. *Evaluation of training course for headmasters: evaluation report.* Kuala Lumpur, Malaysian Education Staff Training Institute (MESTI), 1980.

END

U.S. Dept. of Education

Office of Education
Research and
Improvement (OERI)

ERIC

Date Filmed

March 29, 1991